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# SRT8100LF

## ULTRA LOW VF SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 100 Volt **CURRENT** 8 Ampere

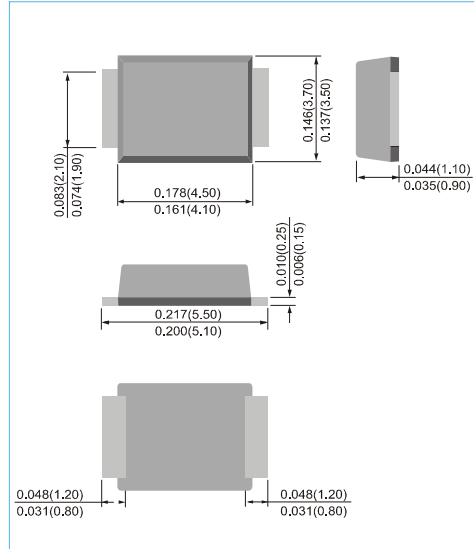
**SMBF** Unit : inch(mm)

### FEATURES

- Ideal for automated placement
- Ultra low forward voltage drop, low power loss
- High efficiency operation
- Low thermal resistance
- Ultra thin profile package for space constrained utilization
- Easy pick and place package suitable for automated handling
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: plastic molded
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0018 ounces, 0.05 grams
- Polarity: Color band denotes cathode end
- Marking: Part number



### MAXIMUM RATINGS (TA=25°C unless otherwise noted)

| PARAMETER   | SYMBOL                            | VALUE        | UNIT |
|---|-----------------------------------|--------------|------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>                  | 100          | V    |
| Maximum RMS Voltage   | V <sub>RMS</sub>                  | 70           | V    |
| Maximum DC Blocking Voltage   | V <sub>R</sub>                    | 100          | V    |
| Maximum Average Rectified Output Current  | I <sub>F(AV)</sub>                | 8            | A    |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load | I <sub>FSM</sub>                  | 80           | A    |
| Typical Junction Capacitance (V <sub>R</sub> =4V, f=1MHz)                           | C <sub>J</sub>                    | 360          | pF   |
| Typical Thermal Resistance (Notes 1)  | R <sub>θJL</sub>                  | 15           | °C/W |
| (Notes 2)   | R <sub>θJA</sub>                  | 135          |      |
| Operating Junction Temperature and Storage Temperature range                        | T <sub>J</sub> , T <sub>STG</sub> | -55 to + 150 | °C   |

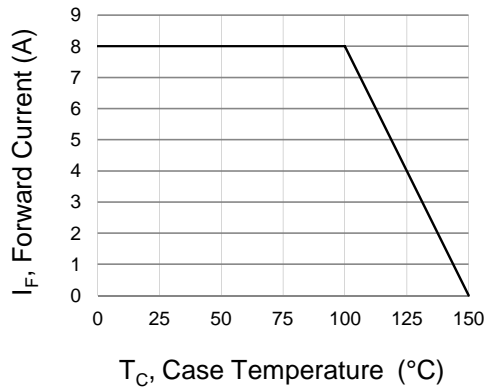
NOTES : 1. Mounted on a 10cm\*10cm\*0.5mm copper pad area  
2. Mounted on a FR4 PCB, single-sided copper, mini pad.



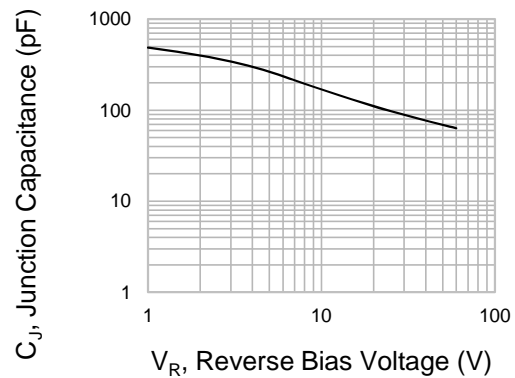
# SRT8100LF

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

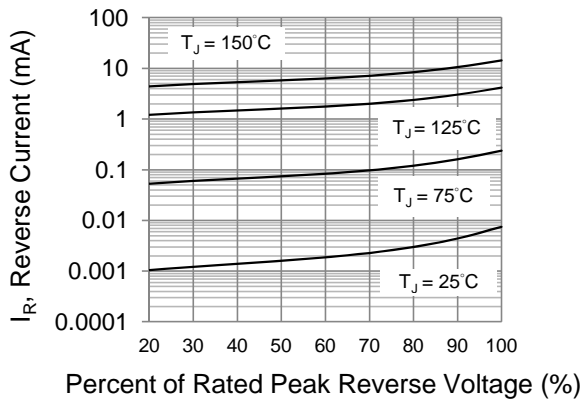
| PARAMETER                     | SYMBOL          | TEST CONDITIONS   | MIN. | TYP. | MAX. | UNIT     |
|-------------------------------|-----------------|---|------|------|------|----------|
| Break down voltage            | V <sub>BR</sub> | I <sub>R</sub> =0.5mA<br>T <sub>A</sub> =25°C                         | 100  | -    | -    | V        |
| Instantaneous forward voltage | V <sub>F</sub>  | I <sub>F</sub> =1A<br>T <sub>A</sub> =25°C                            | -    | 0.42 | -    | V        |
|                               |                 | I <sub>F</sub> =5A<br>T <sub>A</sub> =25°C                            | -    | 0.61 | -    | V        |
|                               |                 | I <sub>F</sub> =8A<br>T <sub>A</sub> =25°C                            | -    | 0.71 | 0.79 | V        |
|                               |                 | I <sub>F</sub> =1A<br>T <sub>A</sub> =125°C                           | -    | 0.33 | -    | V        |
| Reverse current               | I <sub>R</sub>  | V <sub>R</sub> =70V<br>T <sub>A</sub> =25°C                           | -    | 5    | -    | μA       |
|                               |                 | V <sub>R</sub> =100V<br>T <sub>A</sub> =25°C<br>T <sub>A</sub> =125°C | -    | -    | 50   | μA<br>mA |



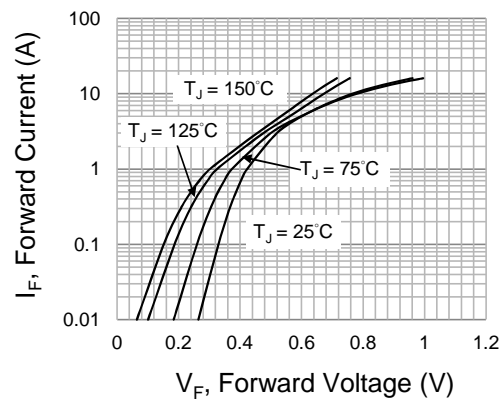
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Forward Characteristics**

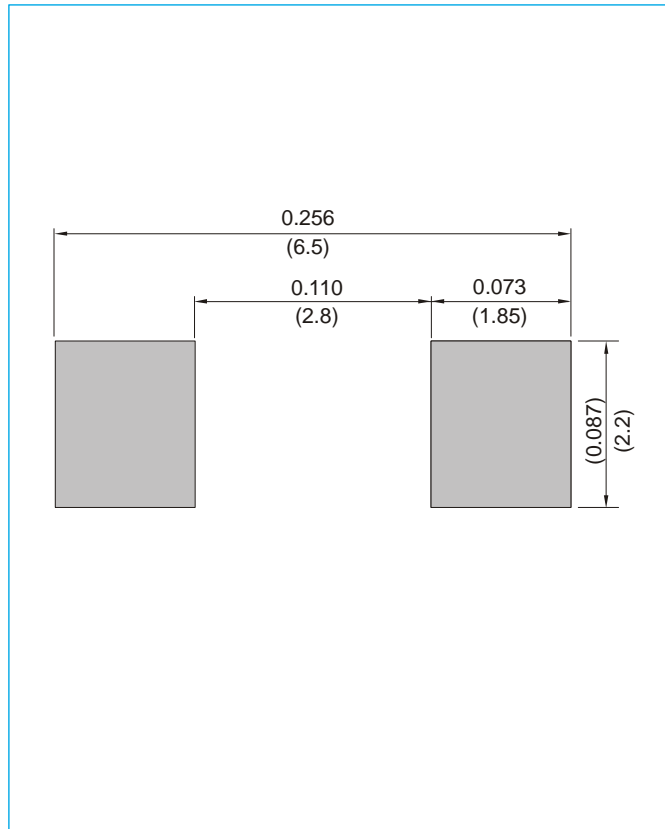


# SRT8100LF

## MOUNTING PAD LAYOUT

SMBF

Unit : inch(mm)



## ORDER INFORMATION

- Packing information  
T/R - 5K per 13" plastic Reel



# SRT8100LF

## Part No\_packing code\_Version

SRT8100LF\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



| Packing Code <b>XX</b>               |                      |                                  |                      | Version Code <b>XXXXX</b> |                      |                                       |
|--------------------------------------|----------------------|----------------------------------|----------------------|---------------------------|----------------------|---------------------------------------|
| Packing type                         | 1 <sup>st</sup> Code | Packing size code                | 2 <sup>nd</sup> Code | HF or RoHS                | 1 <sup>st</sup> Code | 2 <sup>nd</sup> ~5 <sup>th</sup> Code |
| Tape and Ammunition Box (T/B)        | <b>A</b>             | N/A                              | <b>0</b>             | <b>HF</b>                 | <b>0</b>             | serial number                         |
| Tape and Reel (T/R)                  | <b>R</b>             | 7"                               | <b>1</b>             | <b>RoHS</b>               | <b>1</b>             | serial number                         |
| Bulk Packing (B/P)                   | <b>B</b>             | 13"                              | <b>2</b>             |                           |                      |                                       |
| Tube Packing (T/P)                   | <b>T</b>             | 26mm                             | <b>X</b>             |                           |                      |                                       |
| Tape and Reel (Right Oriented) (TRR) | <b>S</b>             | 52mm                             | <b>Y</b>             |                           |                      |                                       |
| Tape and Reel (Left Oriented) (TRL)  | <b>L</b>             | PANASERT T/B CATHODE UP (PBCU)   | <b>U</b>             |                           |                      |                                       |
| FORMING                              | <b>F</b>             | PANASERT T/B CATHODE DOWN (PBCD) | <b>D</b>             |                           |                      |                                       |



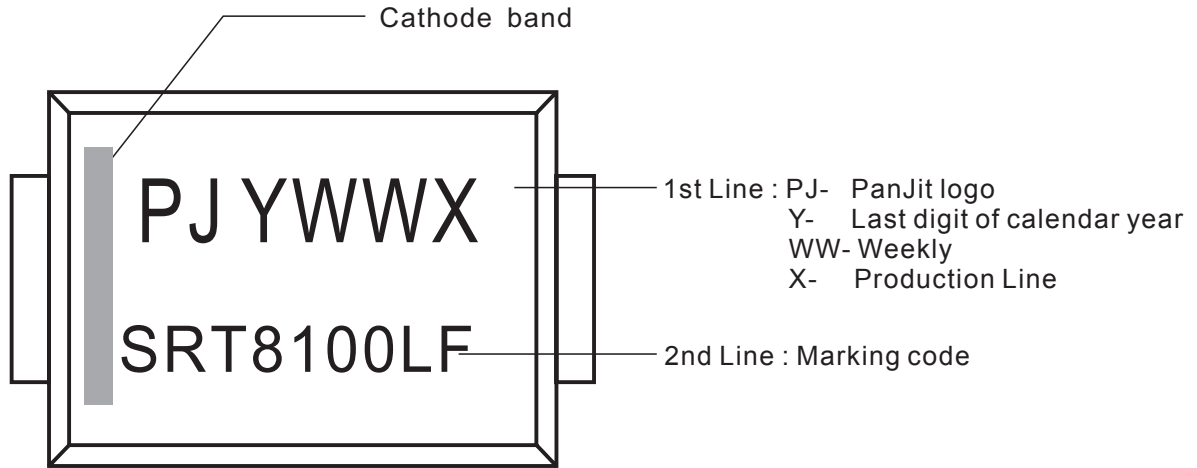
# SRT8100LF

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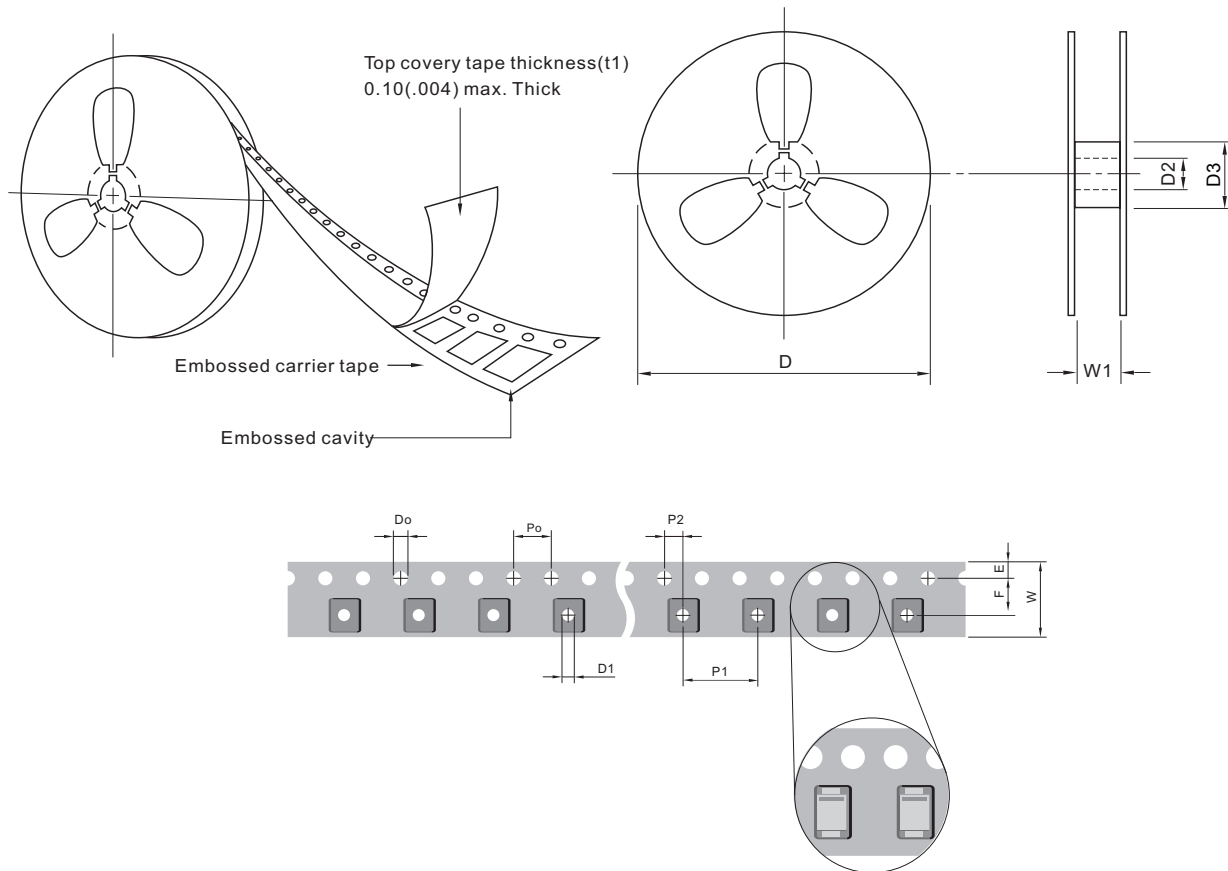


## 2. MARKING





### 3. TAPING



| SYMBOL   | mm (inch)                    |
|----------|------------------------------|
| TYPESIZE | 12.00( 0.472 )               |
| Do       | 1.50 + 0.10 (0.06 + 0.004)   |
| Do       | 1.50 - 0 (0.06 - 0)          |
| D1       | 1.00 ± 0.05 (0.04 ± 0.002)   |
| E        | 1.75 ± 0.10 (0.069 ± 0.004)  |
| F        | 5.50 ± 0.05 (0.217 ± 0.002)  |
| Po       | 4.00 ± 0.10 (0.157 ± 0.004)  |
| P1       | 8.00 ± 0.10 (0.315 ± 0.004)  |
| P2       | 2.00 ± 0.05 (0.079 ± 0.002)  |
| W        | 12.0 + 0.3 (0.472 + 0.012)   |
| W        | 12.0 - 0.1 (0.472 - 0.004)   |
| D2       | 13.0 ± 0.2 (0.512 ± 0.008)   |
| D3       | 100min(3.94)                 |
| W1       | 12.4~18.4 maximum(0.49~0.73) |
| D        | 330 ± 2.0 (13.00 ± 0.079)    |

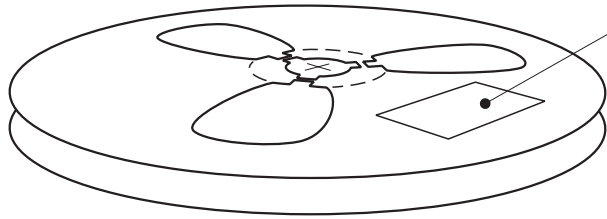
- NOTE:
1. There shall be leader of 230 mm minimum which may consist of carrier and or cover tape followed by a minimum of 160 mm of carrier tape sealed with cover tape.
  2. There shall be minimum of 160 mm of empty component pockets sealed with cover tape.
  3. Devices are packed in accordance with EIA standard EIA-481-A and specifications given above.





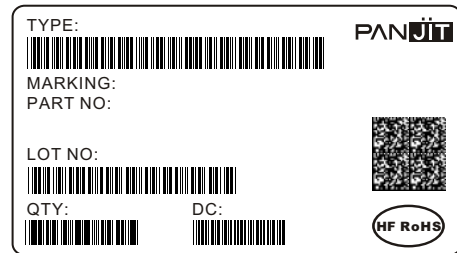
## 4. PACKING

### REEL PACKING

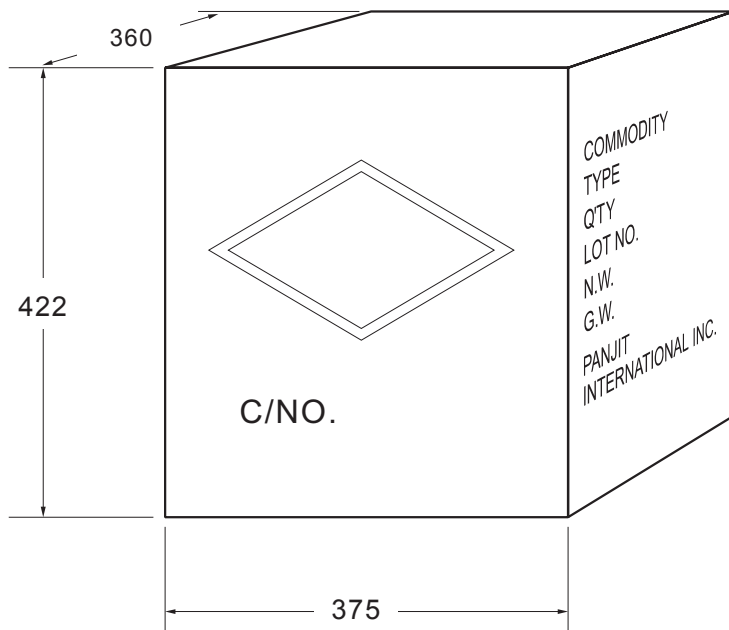


Quantity per Reel: 5,000 pcs

#### LABEL TYPE

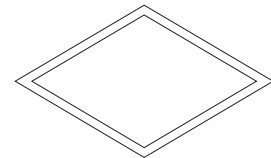


### CARTON



Box Dimensions : mm  
Quantity per Box: 80,000 pcs

#### SHIPPING MARK



C/NO.  
PRODUCT COUNTRY

#### SIDE MARK

COMMODITY:  
TYPE:  
Q'TY:  
LOT NO.  
N.W.  
G.W.  
PANJIT  
INTERNATIONAL INC.



**Packing Specifications**

| Package      | Reel Size | Reel   | Component Space | Tape Space | Reel Dia | Carton Size     | Carton  | Approx. Gross Weight |
|--------------|-----------|--------|-----------------|------------|----------|-----------------|---------|----------------------|
|              | (inch)    | (pcs)  | (mm)            | (mm)       | (mm)     | (mm)            | (EA)    | (kg)                 |
| Reel Packing |           |        |                 |            |          |                 |         |                      |
| DFN0603      | 7         | 10,000 | 2               | 8          | 178      | 390 x 270 x 400 | 800,000 | 9                    |
| DFN 2L       | 7         | 8,000  | 2               | 8          | 178      | 390 x 270 x 400 | 640,000 | 8.6                  |
| DFN 3L       | 7         | 8,000  | 2               | 8          | 178      | 390 x 270 x 400 | 640,000 | 8.6                  |
|              | 13        | 12,000 | 4               | 8          | 330      | 375 x 360 x 230 | 144,000 | 7.6                  |
| DFN2510-10L  | 7         | 5,000  | 4               | 8          | 178      | 390 x 270 x 400 | 400,000 | 10.5                 |
|              | 13        | 12,000 | 4               | 8          | 330      | 375 x 360 x 230 | 144,000 | 6.4                  |
| DFN2020-6L   | 7         | 3,000  | 4               | 8          | 178      | 390 x 270 x 400 | 240,000 | 10.1                 |
| DFN2020-8L   | 7         | 3,000  | 4               | 8          | 178      | 390 x 270 x 400 | 240,000 | 10.1                 |
| DFN3030-8L   | 7         | 5,000  | 8               | 12         | 330      | 375 x 360 x 422 | 70,000  | 7.3                  |
| DFN5060-8L   | 13        | 3,000  | 8               | 12         | 330      | 375 x 360 x 422 | 42,000  | 8.5                  |
| SOP-8        | 13        | 2,500  | 8               | 12         | 330      | 375 x 360 x 230 | 20,000  | 5.7                  |
| SOD-923      | 7         | 8,000  | 2               | 8          | 178      | 390 x 270 x 400 | 640,000 | 7.7                  |
| SOD-523      | 7         | 5,000  | 4               | 8          | 178      | 390 x 270 x 400 | 400,000 | 9.1                  |
|              | 13        | 12,000 | 4               | 8          | 330      | 375 x 360 x 230 | 144,000 | 5.4                  |
| SOD-323HE    | 7         | 5,000  | 4               | 8          | 178      | 390 x 270 x 400 | 400,000 | 11.9                 |
|              | 13        | 12,000 | 4               | 8          | 178      | 375 x 360 x 230 | 144,000 | 8.3                  |
| SOD-323      | 7         | 5,000  | 4               | 8          | 178      | 390 x 270 x 400 | 400,000 | 9.4                  |
|              | 13        | 12,000 | 4               | 8          | 330      | 375 x 360 x 230 | 144,000 | 5.9                  |
| SOD-123HE    | 7         | 3,000  | 4               | 8          | 178      | 390 x 270 x 400 | 240,000 | 12.4                 |
|              | 13        | 10,000 | 4               | 8          | 330      | 375 x 360 x 230 | 120,000 | 8.1                  |
| SOD-123FL    | 7         | 3,000  | 4               | 8          | 178      | 390 x 270 x 400 | 240,000 | 10.6                 |
|              | 13        | 10,000 | 4               | 8          | 330      | 375 x 360 x 230 | 120,000 | 7.2                  |
| SOD-123      | 7         | 3,000  | 4               | 8          | 178      | 390 x 270 x 400 | 240,000 | 9.9                  |
|              | 13        | 10,000 | 4               | 8          | 330      | 375 x 360 x 230 | 120,000 | 6.5                  |
| SOT-723      | 7         | 8,000  | 2               | 8          | 178      | 455 x 270 x 440 | 640,000 | 10.5                 |
| SOT-563      | 7         | 8,000  | 2               | 8          | 178      | 390 x 270 x 400 | 640,000 | 9.4                  |
|              | 13        | 20,000 | 2               | 8          | 330      | 375 x 360 x 230 | 240,000 | 5.2                  |
| SOT-553      | 7         | 4,000  | 4               | 8          | 178      | 390 x 270 x 400 | 320,000 | 9.4                  |
|              | 13        | 10,000 | 4               | 8          | 330      | 375 x 360 x 230 | 120,000 | 5.2                  |
| SOT-543      | 7         | 4,000  | 4               | 8          | 178      | 390 x 270 x 400 | 320,000 | 9.4                  |
|              | 13        | 10,000 | 4               | 8          | 330      | 375 x 360 x 230 | 120,000 | 5.2                  |
| SOT-523      | 7         | 4,000  | 4               | 8          | 178      | 390 x 270 x 400 | 320,000 | 10                   |
| SOT-363      | 7         | 3,000  | 4               | 8          | 178      | 390 x 270 x 400 | 240,000 | 9.3                  |
|              | 13        | 10,000 | 4               | 8          | 330      | 375 x 360 x 230 | 120,000 | 7.1                  |
| SOT-353      | 7         | 3,000  | 4               | 8          | 178      | 390 x 270 x 400 | 240,000 | 10                   |
|              | 13        | 10,000 | 4               | 8          | 330      | 375 x 360 x 230 | 120,000 | 7.2                  |
| SOT-23 6L    | 7         | 3,000  | 4               | 8          | 178      | 390 x 270 x 400 | 240,000 | 14.5                 |
|              | 13        | 10,000 | 4               | 8          | 330      | 375 x 360 x 230 | 120,000 | 7.9                  |
| SOT-23 6L-1  | 7         | 3,000  | 4               | 8          | 178      | 390 x 270 x 400 | 240,000 | 14.5                 |
|              | 13        | 10,000 | 4               | 8          | 330      | 375 x 360 x 230 | 120,000 | 7.9                  |
| SOT-23 5L    | 7         | 3,000  | 4               | 8          | 178      | 390 x 270 x 400 | 240,000 | 14.5                 |
|              | 13        | 10,000 | 4               | 8          | 330      | 375 x 360 x 230 | 120,000 | 7.9                  |
| SOT-323      | 7         | 3,000  | 4               | 8          | 178      | 390 x 270 x 400 | 240,000 | 7.9                  |
|              | 13        | 12,000 | 4               | 8          | 330      | 375 x 360 x 230 | 144,000 | 6.1                  |
| SOT-23-1     | 7         | 3,000  | 4               | 8          | 178      | 390 x 270 x 400 | 240,000 | 9.8                  |
|              | 13        | 12,000 | 4               | 8          | 330      | 375 x 360 x 230 | 144,000 | 7                    |
| SOT-23       | 7         | 3,000  | 4               | 8          | 178      | 390 x 270 x 400 | 240,000 | 9.8                  |
|              | 13        | 12,000 | 4               | 8          | 330      | 375 x 360 x 230 | 144,000 | 7                    |
| SOT-223      | 13        | 2,500  | 4               | 8          | 330      | 375 x 360 x 422 | 35,000  | 13.2                 |



**Packing Specifications**

| Package                   | Reel Size | Reel   | Component Space | Tape Space | Reel Dia | Carton Size     | Carton  | Approx. Gross Weight |
|---------------------------|-----------|--------|-----------------|------------|----------|-----------------|---------|----------------------|
|                           | (inch)    | (pcs)  | (mm)            | (mm)       | (mm)     | (mm)            | (EA)    | (kg)                 |
| Reel Packing              |           |        |                 |            |          |                 |         |                      |
| SMAF                      | 7         | 3,000  | 4               | 12         | 178      | 390 x 240 x 420 | 120,000 | 10.9                 |
|                           | 13        | 10,000 | 4               | 12         | 330      | 375 x 360 x 422 | 160,000 | 17.1                 |
| SMBF                      | 7         | 1,500  | 8               | 12         | 178      | 390 x 240 x 420 | 60,000  | 9.6                  |
|                           | 13        | 5,000  | 8               | 12         | 330      | 375 x 360 x 422 | 80,000  | 15.6                 |
| SMA(W)                    | 7         | 1,800  | 4               | 12         | 178      | 390 x 240 x 420 | 100,800 | 13                   |
|                           | 13        | 7,500  | 4               | 12         | 330      | 355 x 355 x 400 | 150,000 | 20.4                 |
| SMA/DO-214AC              | 7         | 1,800  | 4               | 12         | 178      | 390 x 240 x 420 | 72,000  | 10                   |
|                           | 13        | 7,500  | 4               | 12         | 330      | 375 x 360 x 390 | 120,000 | 17.4                 |
| SMB/DO-214AA              | 7         | 500    | 8               | 12         | 178      | 390 x 240 x 420 | 20,000  | 6.5                  |
|                           | 13        | 3,000  | 8               | 12         | 330      | 375 x 360 x 390 | 48,000  | 13.2                 |
| SMC/DO-214AB              | 7         | 500    | 8               | 16         | 178      | 390 x 240 x 420 | 15,000  | 8.4                  |
|                           | 13        | 3,000  | 8               | 16         | 330      | 375 x 360 x 390 | 42,000  | 18                   |
| R-1                       | 13        | 5,000  | 5               | 52         | 330      | 340 x 340 x 410 | 25,000  | 7.8                  |
| A-405                     | 13        | 5,000  | 5               | 52         | 330      | 340 x 340 x 410 | 25,000  | 7.79                 |
| DO-41                     | 13        | 5,000  | 5               | 52         | 330      | 340 x 340 x 410 | 25,000  | 11.1                 |
| DO-15                     | 13        | 4,000  | 5               | 52         | 330      | 340 x 340 x 410 | 20,000  | 11.4                 |
| DO-201AD                  | 13        | 1,250  | 10              | 52         | 330      | 340 x 340 x 410 | 6,250   | 9.2                  |
| DO-201AE                  | 13        | 1,250  | 10              | 52         | 330      | 340 x 340 x 410 | 6,250   | 9.2                  |
| P-600                     | 13        | 800    | 10              | 52         | 330      | 340 x 340 x 410 | 4,000   | 9.9                  |
| DO-34                     | 15        | 10,000 | 5               | 52         | 360      | 360 x 360 x 395 | 50,000  | 10.1                 |
| DO-35                     | 15        | 10,000 | 5               | 52         | 360      | 360 x 360 x 395 | 50,000  | 11.2                 |
| DO-41G                    | 15        | 5,000  | 5               | 52         | 360      | 360 x 360 x 395 | 25,000  | 10.9                 |
| MICRO-MELF                | 7         | 2,500  | 4               | -          | 178      | 385 x 380 x 260 | 200,000 | 9.3                  |
|                           | 13        | 10,000 | 4               | -          | 330      | 360 x 360 x 395 | 200,000 | 11.5                 |
| QUADRO-MELF               | 7         | 2,500  | 4               | -          | 178      | 385 x 380 x 260 | 200,000 | 13.3                 |
|                           | 13        | 10,000 | 4               | -          | 330      | 360 x 360 x 395 | 200,000 | 14.9                 |
| MINI-MELF/LL-34           | 7         | 2,500  | 4               | -          | 178      | 385 x 380 x 260 | 200,000 | 12.7                 |
|                           | 13        | 10,000 | 4               | -          | 330      | 360 x 360 x 395 | 200,000 | 14.6                 |
| MELF/DL-41                | 7         | 1,500  | 4               | -          | 178      | 385 x 380 x 260 | 84,000  | 18.3                 |
|                           | 13        | 5,000  | 4               | -          | 330      | 360 x 360 x 395 | 100,000 | 23.5                 |
| MDI                       | 13        | 3,000  | 8               | 12         | 330      | 375 x 360 x 390 | 48,000  | 14.7                 |
| MICRO DIP/TDI             | 7         | 1,000  | 8               | 12         | 178      | 390 x 240 x 420 | 40,000  | 9.5                  |
|                           | 13        | 4,000  | 8               | 12         | 330      | 375 x 360 x 422 | 64,000  | 17                   |
| SDIP                      | 13        | 1,500  | 12              | 16         | 330      | 375 x 360 x 390 | 21,000  | 14.3                 |
| TO-277                    | 13        | 5,000  | 8               | 12         | 330      | 375 x 360 x 422 | 80,000  | 20.6                 |
| TO-277B                   | 13        | 5,000  | 8               | 12         | 330      | 375 x 360 x 390 | 80,000  | 21.8                 |
| TO-252                    | 13        | 3,000  | 8               | 16         | 330      | 375 x 360 x 422 | 42,000  | 18.8                 |
| TO-252AA                  | 13        | 3,000  | 8               | 16         | 330      | 375 x 360 x 422 | 42,000  | 18.8                 |
| TO-263/D <sup>2</sup> PAK | 13        | 800    | 16              | 24         | 330      | 375 x 360 x 422 | 6,400   | 14.5                 |



**Packing Specifications**

| Package        | Inner Box Size | Box   | Carton Size     | Carton  | Approx. Gross Weight |
|----------------|----------------|-------|-----------------|---------|----------------------|
|                | (mm)           | (EA)  | (mm)            | (EA)    | (kg)                 |
| Bulk Packing   |                |       |                 |         |                      |
| R-1            | 198 x 84 x 20  | 1,000 | 459 x 214 x 256 | 50,000  | 12.7                 |
| A-405          | 198 x 84 x 20  | 1,000 | 459 x 214 x 256 | 50,000  | 12.7                 |
| DO-41          | 198 x 84 x 20  | 1,000 | 459 x 214 x 256 | 50,000  | 19.3                 |
| DO-15          | 200 x 85 x 25  | 1,000 | 459 x 214 x 256 | 40,000  | 20.7                 |
| DO-201AD       | 200 x 85 x 40  | 500   | 459 x 214 x 256 | 12,500  | 16                   |
| DO-201AE       | 200 x 85 x 40  | 500   | 459 x 214 x 256 | 12,500  | 16                   |
| P-600          | 208 x 82 x 40  | 100   | 459 x 214 x 256 | 2,500   | 11.3                 |
| DO-34          | 240 x 100 x 90 | 2,000 | 406 x 335 x 257 | 120,000 | 14.5                 |
| DO-35          | 240 x 100 x 90 | 2,000 | 406 x 335 x 257 | 120,000 | 17.1                 |
| DO-41G         | 240 x 100 x 90 | 1,000 | 406 x 335 x 257 | 60,000  | 18.5                 |
| TO-220AC       | 540 x 145 x 85 | 2,000 | 555 x 306 x 200 | 8,000   | 22.9                 |
| ITO-220AC      | 540 x 145 x 85 | 2,000 | 555 x 306 x 200 | 8,000   | 20.5                 |
| TO-220AB       | 540 x 145 x 85 | 2,000 | 555 x 306 x 200 | 8,000   | 22.9                 |
| ITO-220AB      | 540 x 145 x 85 | 2,000 | 555 x 306 x 200 | 8,000   | 20.5                 |
| ITO-220AB-F    | 540 x 145 x 85 | 2,000 | 555 x 306 x 200 | 8,000   | 20.5                 |
| TO-251AA       | 555 x 145 x 95 | 8,400 | 580 x 310 x 220 | 33,600  | 22                   |
| TO-251AB       | 555 x 145 x 95 | 8,400 | 580 x 310 x 220 | 33,600  | 22                   |
| TO-92          | 188 x 188 x 67 | 5,000 | 390 x 420 x 240 | 50,000  | 13                   |
| TO-3PN         | -              | -     | 600 x 185 x 230 | 1,800   | 16.4                 |
| TO-3PL         | -              | -     | 530 x 255 x 110 | 1,500   | 12.2                 |
| TO-3P/TO-247AD | -              | -     | 530 x 243 x 100 | 1,500   | 13.9                 |
| TO-3PS/TO-247S | -              | -     | 511 x 243 x 107 | 1,500   | 12.2                 |
| DIP            | -              | -     | 459 x 214 x 256 | 12,000  | 6.5                  |
| SDIP           | -              | -     | 459 x 214 x 256 | 24,000  | 15.7                 |

| Package            | Inner Box Size | Ammo  | Component Space | Tape Space | Carton Size     | Carton  | Approx. Gross Weight |
|--------------------|----------------|-------|-----------------|------------|-----------------|---------|----------------------|
|                    | (mm)           | (pcs) | (mm)            | (mm)       | (mm)            | (EA)    | (kg)                 |
| Ammunition Packing |                |       |                 |            |                 |         |                      |
| R-1                | 255 x 47 x 73  | 3,000 | 5               | 26         | 310 x 268 x 170 | 36,000  | 6.3                  |
|                    | 255 x 73 x 73  | 3,000 | 5               | 52         | 310 x 268 x 170 | 24,000  | 6.3                  |
|                    | 255 x 73 x 122 | 5,000 | 5               | 52         | 339 x 276 x 274 | 40,000  | 10.3                 |
| A-405              | 255 x 47 x 150 | 5,000 | 5               | 26         | 339 x 276 x 330 | 60,000  | 12.4                 |
|                    | 255 x 75 x 150 | 5,000 | 5               | 52         | 339 x 276 x 330 | 40,000  | 16                   |
| DO-41              | 255 x 75 x 150 | 5,000 | 5               | 52         | 339 x 276 x 330 | 40,000  | 15.9                 |
|                    | 255 x 73 x 90  | 3,000 | 5               | 52         | 333 x 281 x 218 | 24,000  | 8.9                  |
| DO-15              | 255 x 75 x 150 | 3,000 | 5               | 52         | 339 x 276 x 330 | 24,000  | 13.3                 |
| DO-201AD           | 255 x 47 x 122 | 1,250 | 10              | 52         | 339 x 276 x 330 | 10,000  | 13.4                 |
| DO-201AE           | 255 x 47 x 122 | 1,250 | 10              | 52         | 339 x 276 x 330 | 10,000  | 13.4                 |
| P-600              | 255 x 47 x 122 | 400   | 10              | 52         | 339 x 276 x 330 | 3,200   | 8.1                  |
| DO-34              | 248 x 80 x 48  | 5,000 | 5               | 26         | 406 x 335 x 257 | 150,000 | 14.5                 |
|                    | 248 x 80 x 75  | 5,000 | 5               | 52         | 406 x 335 x 257 | 100,000 | 12.7                 |
| DO-35              | 248 x 80 x 48  | 5,000 | 5               | 26         | 406 x 335 x 257 | 150,000 | 16.7                 |
|                    | 248 x 80 x 75  | 5,000 | 5               | 52         | 406 x 335 x 257 | 100,000 | 15.2                 |
| DO-41G             | 248 x 80 x 48  | 2,500 | 5               | 26         | 406 x 335 x 257 | 75,000  | 17.1                 |
|                    | 248 x 80 x 75  | 2,500 | 5               | 52         | 406 x 335 x 257 | 50,000  | 15.6                 |

# 5.HIGH RELIABILITY TEST SPEC (Schottky & Switching & Rectifiers & Bridge)

Date : 2015.01.29 rev.05

| NO. | TEST ITEM                                     | TEST CONDITION   | REFERENCED DOCUMENT            | LOT QUALITY LEVEL                        |
|-----|---|--|--------------------------------|--|
| 1   | HIGH TEMPERATURE REVERSE BIAS (H.T.R.B)       | $T_j \leq T_j \text{ max}$<br>$V=0.8\text{VR}$ (CUSTOMER SPEC.) DC supply<br>1000hr  | JESD22-A108C                   | S.S=77<br>ACCEPT FOR 0<br>FAILURE ONLY.  |
| 2   | INTERMITTENT FORWARD OPERATING LIFE (I.F.O.L) | $I=I_o \times 1.0$ DC supply<br>POWER ON: at least 2 min , POWER OFF: 2 min<br>15000cycle  | MIL-STD-750E<br>METHOD 1037.2  | S.S=77<br>ACCEPT FOR 0<br>FAILURE ONLY.  |
| 3   | CONTINUE FORWARD OPERATING LIFE (C.F.O.L)     | $T_a$ should be specified if other than room temp<br>$I=I_o \pm 10\%$ DC supply<br>168hr   | MIL-STD-750E<br>METHOD 1027.3  | S.S=77<br>ACCEPT FOR 0<br>FAILURE ONLY.  |
| 4   | TEMPERATURE CYCLING (T.C.T)                   | $T_a = -55 + 0 - 10^\circ\text{C}$ t=10min (Min.)<br>$T_a = +150 + 15 - 0^\circ\text{C}$ t=10min (Min.)<br>1000cycle   | JESD22-A104D                   | S.S=77<br>ACCEPT FOR 0<br>FAILURE ONLY.  |
| 5   | PRESSURE COOKER (PCT)                         | $T_a = 121^\circ\text{C}$ , $P=29.7\text{psia}$ ,<br>Relative Humidity = 100%RH<br>96hr  | JESD22-A102D                   | S.S=77<br>ACCEPT FOR 0<br>FAILURE ONLY.  |
| 6   | THERMAL SHOCK (T.S.T)                         | HOT TANK $T_a = 100 + 10 - 2^\circ\text{C}$ t= 5min<br>COLD TANK $T_a = 0 + 2 - 10^\circ\text{C}$ t= 5min<br>100 cycle   | JESD22-A106B                   | S.S=77<br>ACCEPT FOR 0<br>FAILURE ONLY.  |
| 7   | HIGH TEMPERATURE STORAGE LIFE (H.T.S.L)       | $T_a = \text{specified max storage temperature}$ $\pm 5^\circ\text{C}$<br>1000hr   | JESD22-A103C                   | S.S=77<br>ACCEPT FOR 0<br>FAILURE ONLY.  |
| 8   | TEMPERATURE HUMIDITY STORAGE (T.H.S)          | $T_a = 85 \pm 2^\circ\text{C}$ , $\text{RH} = 85 \pm 5\%$<br>1000hr  | EIAJ ED-4701/100<br>METHOD 103 | S.S=77<br>ACCEPT FOR 0<br>FAILURE ONLY.  |
| 9   | SOLDERABILITY TEST                            | TEMPERATURE OF SOLDER POT= $245 \pm 5^\circ\text{C}$<br>TIME FOR DIPPING IN SOLDER= $5 \pm 0.5$ SEC<br>DIPPING DEPTH= 0.05inch MAX FROM THE BODY<br>1 cycle                | JESD22-B102D                   | S.S= 10<br>ACCEPT FOR 0<br>FAILURE ONLY. |
| 10  | SOLDER RESISTANCE                             | TEMPERATURE OF SOLDER POT= $260 \pm 5^\circ\text{C}$<br>TIME FOR DIPPING IN SOLDER= $10 \pm 2 - 0$ SEC<br>DIPPING DEPTH= $1.57 \pm 0.79\text{mm}$ FROM THE BODY<br>1 cycle | JESD22-B106D                   | S.S= 30<br>ACCEPT FOR 0<br>FAILURE ONLY. |
| 11  | FORWARD SURGE CURRENT                         | SQ WAVE OR SINE WAVE<br>IFSM= DATE SHEET SPEC<br>TIME= $T_p$   | MIL-STD-750E<br>METHOD 4066.4  | S.S= 22<br>ACCEPT FOR 0<br>FAILURE ONLY. |