



1.DATA SHEET

1.5SMCJ SERIES

SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR

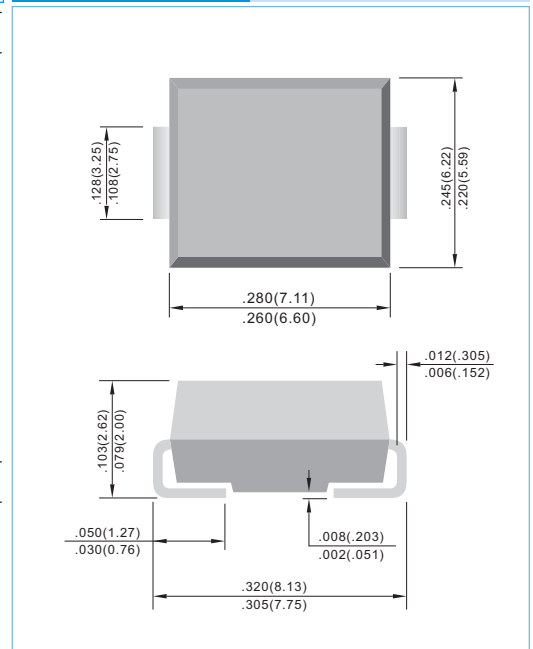
VOLTAGE 5.0 to 220 Volts **PEAK PULSE POWER** 1500 Watts **SMC/DO-214AB** Unit: inch (mm)

FEATURES

- For surface mounted applications in order to optimize board space.
- Low profile package
- Built-in strain relief
- Glass passivated junction
- Low inductance
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- High temperature soldering : 260°C /10 seconds at terminals
- Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

MECHANICAL DATA

Case: JEDEC DO-214AB, Molded plastic over passivated junction.
 Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
 Polarity: Color band denotes positive end (cathode)
 Standard Packaging: 16mm tape (EIA-481)
 Weight: 0.007 ounce, 0.021 gram



DEVICES FOR BIPOLAR APPLICATIONS

For Bidirectional use C or CA Suffix for types 1.5SMCJ5.0 thru types 1.5SMCJ220.
 Electrical characteristics apply in both directions.

MAXIMUM RATINGS AND CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.
 For Capacitive load derate current by 20%.

Rating	Symbol	Value	Units
Peak Power Dissipation at $T_A=25^\circ\text{C}$, $T_P=1\text{ms}$ (Note 1, 2, Fig. 1)	PPPM	1500	Watts
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (Note 2, 3)	ISM	100	Amps
Peak Pulse Current Current on 10/1000s waveform (Note 1, Fig. 3)	IPM	See Table 1	Amps
Operating Junction and Storage Temperature Range	T_J/T_{STG}	-55 to +150	$^\circ\text{C}$

NOTES:

1. Non-repetitive current pulse, per Fig. 3 and derated above $T_A=25^\circ\text{C}$ per Fig. 2.
2. Mounted on 5.0mm² (.013mm thick) land areas.
3. Measured on 8.3ms, single half sine-wave or equivalent square wave, duty cycle= 4 pulses per minutes maximum.



Part Number	Part Number	Marking Code		V _{RWM}	V _{BR} @ I _F			E @ V _{RWM}		V _C @ I _F	
					Min.	Max.	I _F	UNI-	BF-	V	A
UNI-	BF	UNI-	BF-	V	V	V	mA	uA	uA	V	A
1500W Transient Voltage Suppressor											
1.5SMCJ5.0	1.5SMCJ5.0C	GDD	BDD	5.0	6.40	7.55	10	1000	2000	9.6	156.2
1.5SMCJ5.0A	1.5SMCJ5.0CA	GDE	BDE	5.0	6.40	7.25	10	1000	2000	9.2	163.0
1.5SMCJ6.0	1.5SMCJ6.0C	GDF	BDF	6.0	6.67	8.45	10	1000	2000	11.4	131.6
1.5SMCJ6.0A	1.5SMCJ6.0CA	GDG	BDG	6.0	6.67	7.67	10	1000	2000	10.3	145.6
1.5SMCJ6.5	1.5SMCJ6.5C	GDH	BDH	6.5	7.22	9.14	10	500	1000	12.3	122.0
1.5SMCJ6.5A	1.5SMCJ6.5CA	GDK	BDK	6.5	7.22	8.30	10	500	1000	11.2	133.9
1.5SMCJ7.0	1.5SMCJ7.0C	GDL	BDL	7.0	7.78	9.86	10	200	400	13.3	112.8
1.5SMCJ7.0A	1.5SMCJ7.0CA	GDM	BDM	7.0	7.78	8.95	10	200	400	12.0	125.0
1.5SMCJ7.5	1.5SMCJ7.5C	GDN	BDN	7.5	8.33	10.67	1.0	100	200	14.3	104.9
1.5SMCJ7.5A	1.5SMCJ7.5CA	GDP	BDP	7.5	8.33	9.58	1.0	100	200	12.9	116.3
1.5SMCJ8.0	1.5SMCJ8.0C	GDQ	BDQ	8.0	8.89	11.30	1.0	50	100	15.0	100.0
1.5SMCJ8.0A	1.5SMCJ8.0CA	GDR	BDR	8.0	8.89	10.23	1.0	50	100	13.6	110.3
1.5SMCJ8.5	1.5SMCJ8.5C	GDS	BDS	8.5	9.44	11.92	1.0	25	50	15.9	94.3
1.5SMCJ8.5A	1.5SMCJ8.5CA	GDT	BDT	8.5	9.44	10.82	1.0	25	50	14.4	104.2
1.5SMCJ9.0	1.5SMCJ9.0C	GDU	BDU	9.0	10.0	12.6	1.0	10	20	16.9	88.7
1.5SMCJ9.0A	1.5SMCJ9.0CA	GDV	BDV	9.0	10.0	11.5	1.0	10	20	15.4	97.4
1.5SMCJ10	1.5SMCJ10C	GDW	BDW	10	11.1	14.1	1.0	5	5	18.8	79.8
1.5SMCJ10A	1.5SMCJ10CA	GDX	BDX	10	11.1	12.8	1.0	5	5	17.0	88.2
1.5SMCJ11	1.5SMCJ11C	GDY	BDY	11	12.2	15.4	1.0	5	5	20.1	74.6
1.5SMCJ11A	1.5SMCJ11CA	GDZ	BDZ	11	12.2	14.0	1.0	5	5	18.2	82.4
1.5SMCJ12	1.5SMCJ12C	GED	BED	12	13.3	16.9	1.0	5	5	22.0	68.2
1.5SMCJ12A	1.5SMCJ12CA	GEE	BEE	12	13.3	15.3	1.0	5	5	19.9	75.3
1.5SMCJ13	1.5SMCJ13C	GEF	BEF	13	14.4	18.2	1.0	1	1	23.8	63.0
1.5SMCJ13A	1.5SMCJ13CA	GEG	BEG	13	14.4	16.5	1.0	1	1	21.5	69.7
1.5SMCJ14	1.5SMCJ14C	GEH	BEH	14	15.6	19.8	1.0	1	1	25.8	58.1
1.5SMCJ14A	1.5SMCJ14CA	GEK	BEK	14	15.6	17.9	1.0	1	1	23.2	64.7
1.5SMCJ15	1.5SMCJ15C	GEL	BEL	15	16.7	21.1	1.0	1	1	26.9	55.8
1.5SMCJ15A	1.5SMCJ15CA	GEM	BEM	15	16.7	19.2	1.0	1	1	24.4	61.5
1.5SMCJ16	1.5SMCJ16C	GEN	BEN	16	17.8	22.6	1.0	1	1	28.8	52.1
1.5SMCJ16A	1.5SMCJ16CA	GEP	BEP	16	17.8	20.5	1.0	1	1	26.0	57.7
1.5SMCJ17	1.5SMCJ17C	GEQ	BEQ	17	18.9	23.9	1.0	1	1	30.5	49.2
1.5SMCJ17A	1.5SMCJ17CA	GER	BER	17	18.9	21.7	1.0	1	1	27.6	53.3
1.5SMCJ18	1.5SMCJ18C	GES	BES	18	20.0	25.3	1.0	1	1	32.2	46.6
1.5SMCJ18A	1.5SMCJ18CA	GET	BET	18	20.0	23.3	1.0	1	1	29.2	51.4
1.5SMCJ20	1.5SMCJ20C	GEU	BEU	20	22.2	28.1	1.0	1	1	35.8	41.9
1.5SMCJ20A	1.5SMCJ20CA	GEV	BEV	20	22.2	25.5	1.0	1	1	32.4	46.3
1.5SMCJ22	1.5SMCJ22C	GEW	BEW	22	24.4	30.9	1.0	1	1	39.4	38.1
1.5SMCJ22A	1.5SMCJ22CA	GEX	BEX	22	24.4	28.0	1.0	1	1	35.5	42.2
1.5SMCJ24	1.5SMCJ24C	GEY	BEY	24	26.7	33.8	1.0	1	1	43.0	34.9
1.5SMCJ24A	1.5SMCJ24CA	GEZ	BEZ	24	26.7	30.7	1.0	1	1	38.9	38.6
1.5SMCJ26	1.5SMCJ26C	GFD	BFD	26	28.9	36.6	1.0	1	1	46.6	32.2
1.5SMCJ26A	1.5SMCJ26CA	GFE	BFE	26	28.9	33.2	1.0	1	1	42.1	35.6
1.5SMCJ28	1.5SMCJ28C	GFF	BFF	28	31.1	39.4	1.0	1	1	50.0	30.0
1.5SMCJ28A	1.5SMCJ28CA	GFG	BFG	28	31.1	35.8	1.0	1	1	45.4	33.0
1.5SMCJ30	1.5SMCJ30C	GFH	BFH	30	33.3	42.2	1.0	1	1	53.5	28.0
1.5SMCJ30A	1.5SMCJ30CA	GFK	BFK	30	33.3	38.3	1.0	1	1	48.4	31.0
1.5SMCJ33	1.5SMCJ33C	GFL	BFL	33	36.7	46.5	1.0	1	1	59.0	25.2
1.5SMCJ33A	1.5SMCJ33CA	GFM	BFM	33	36.7	42.2	1.0	1	1	53.3	28.1
1.5SMCJ36	1.5SMCJ36C	GFN	BFN	36	40.0	50.7	1.0	1	1	64.3	23.3
1.5SMCJ36A	1.5SMCJ36CA	GFP	BFP	36	40.0	46.0	1.0	1	1	58.1	25.8
1.5SMCJ40	1.5SMCJ40C	GFQ	BFQ	40	44.4	56.3	1.0	1	1	71.4	21.0
1.5SMCJ40A	1.5SMCJ40CA	GFR	BFR	40	44.4	51.1	1.0	1	1	64.5	23.2



Part Number	Part Number	Marking Code		V _{RRM}	V _{BR} @ I _T			I _T @ V _{RRM}		V _C @ I _P	
					Min.	Max.	I _T	UNI-	BI-	V	A
UNI-	BI-	UNI-	BI-	V	V	V	mA	uA	uA	V	A
1500W Transient Voltage Suppressor											
1.5SMCJ43	1.5SMCJ43C	GFS	BFS	43	47.8	60.5	1.0	1	1	76.7	19.6
1.5SMCJ43A	1.5SMCJ43CA	GFT	BFT	43	47.8	54.9	1.0	1	1	69.4	21.6
1.5SMCJ45	1.5SMCJ45C	GFU	BFU	45	50.0	63.3	1.0	1	1	80.3	18.7
1.5SMCJ45A	1.5SMCJ45CA	GFV	BFV	45	50.0	57.5	1.0	1	1	72.7	20.6
1.5SMCJ48	1.5SMCJ48C	GFW	BFW	48	53.3	67.5	1.0	1	1	85.5	17.5
1.5SMCJ48A	1.5SMCJ48CA	GFY	BFY	48	53.3	61.3	1.0	1	1	77.4	19.4
1.5SMCJ51	1.5SMCJ51C	GFZ	BFZ	51	56.7	71.8	1.0	1	1	91.1	18.5
1.5SMCJ51A	1.5SMCJ51CA	GGD	BGD	51	56.7	65.2	1.0	1	1	82.4	18.2
1.5SMCJ54	1.5SMCJ54C	GGE	BGE	54	60.0	76.0	1.0	1	1	96.3	15.6
1.5SMCJ54A	1.5SMCJ54CA	GGF	BGF	54	60.0	69.0	1.0	1	1	87.1	17.2
1.5SMCJ58	1.5SMCJ58C	GGG	BGG	58	64.4	81.6	1.0	1	1	103	14.6
1.5SMCJ58A	1.5SMCJ58CA	GGH	BGH	58	64.4	74.1	1.0	1	1	93.6	16.0
1.5SMCJ60	1.5SMCJ60C	GGI	BGI	60	66.7	84.5	1.0	1	1	107	14.0
1.5SMCJ60A	1.5SMCJ60CA	GGJ	BGJ	60	66.7	76.7	1.0	1	1	96.8	15.5
1.5SMCJ64	1.5SMCJ64C	GGK	BGK	64	71.1	90.1	1.0	1	1	114	13.2
1.5SMCJ64A	1.5SMCJ64CA	GGM	BGM	64	71.1	81.8	1.0	1	1	103	14.6
1.5SMCJ70	1.5SMCJ70C	GGN	BGN	70	77.8	98.6	1.0	1	1	125	12.0
1.5SMCJ70A	1.5SMCJ70CA	GGP	BGP	70	77.8	89.5	1.0	1	1	113	13.3
1.5SMCJ75	1.5SMCJ75C	GGQ	BGQ	75	83.3	105.7	1.0	1	1	134	11.2
1.5SMCJ75A	1.5SMCJ75CA	GGR	BGR	75	83.3	95.8	1.0	1	1	121	12.4
1.5SMCJ78	1.5SMCJ78C	GGS	BGS	78	86.7	109.8	1.0	1	1	139	10.8
1.5SMCJ78A	1.5SMCJ78CA	GGT	BGT	78	86.7	99.7	1.0	1	1	126	11.4
1.5SMCJ85	1.5SMCJ85C	GGU	BGU	85	94.4	119.2	1.0	1	1	151	9.9
1.5SMCJ85A	1.5SMCJ85CA	GGV	BGV	85	94.4	108.2	1.0	1	1	137	10.4
1.5SMCJ90	1.5SMCJ90C	GGW	BGW	90	100	126.5	1.0	1	1	160	9.4
1.5SMCJ90A	1.5SMCJ90CA	GGX	BGX	90	100	115.5	1.0	1	1	146	10.3
1.5SMCJ100	1.5SMCJ100C	GGY	BGY	100	111	141.0	1.0	1	1	179	8.4
1.5SMCJ100A	1.5SMCJ100CA	GGZ	BGZ	100	111	128.0	1.0	1	1	162	9.3
1.5SMCJ110	1.5SMCJ110C	GHD	BHD	110	122	154.5	1.0	1	1	196	7.7
1.5SMCJ110A	1.5SMCJ110CA	GHE	BHE	110	122	140.5	1.0	1	1	177	8.4
1.5SMCJ120	1.5SMCJ120C	GHF	BHF	120	133	169.0	1.0	1	1	214	7.0
1.5SMCJ120A	1.5SMCJ120CA	GHG	BHG	120	133	153.0	1.0	1	1	193	7.9
1.5SMCJ130	1.5SMCJ130C	GHH	BHH	130	144	182.5	1.0	1	1	231	6.5
1.5SMCJ130A	1.5SMCJ130CA	GHK	BHK	130	144	165.5	1.0	1	1	209	7.2
1.5SMCJ150	1.5SMCJ150C	GHL	BHL	150	167	211.5	1.0	1	1	268	5.6
1.5SMCJ150A	1.5SMCJ150CA	GHM	BHM	150	167	192.5	1.0	1	1	243	6.2
1.5SMCJ160	1.5SMCJ160C	GHN	BHN	160	178	226.0	1.0	1	1	287	5.2
1.5SMCJ160A	1.5SMCJ160CA	GHP	BHP	160	178	205.0	1.0	1	1	259	5.8
1.5SMCJ170	1.5SMCJ170C	GHQ	BHQ	170	189	239.5	1.0	1	1	304	4.9
1.5SMCJ170A	1.5SMCJ170CA	GHR	BHR	170	189	217.5	1.0	1	1	275	5.5
1.5SMCJ180	1.5SMCJ180C	GHS	BHS	180	198	253.8	1.0	1	1	322	4.7
1.5SMCJ180A	1.5SMCJ180CA	GHT	BHT	180	198	230.4	1.0	1	1	292	5.1
1.5SMCJ190	1.5SMCJ190C	GHU	BHU	190	209	267.9	1.0	1	1	340	4.4
1.5SMCJ190A	1.5SMCJ190CA	GHV	BHV	190	209	243.2	1.0	1	1	308	4.8
1.5SMCJ200	1.5SMCJ200C	GHW	BHW	200	220	282.0	1.0	1	1	358	4.1
1.5SMCJ200A	1.5SMCJ200CA	GHX	BHX	200	220	256.0	1.0	1	1	324	4.6
1.5SMCJ210	1.5SMCJ210C	GHY	BHY	210	231	296.1	1.0	1	1	376	4.0
1.5SMCJ210A	1.5SMCJ210CA	GHZ	BHZ	210	231	268.8	1.0	1	1	340	4.4
1.5SMCJ220	1.5SMCJ220C	GD	BD	220	242	310.2	1.0	1	1	394	3.8
1.5SMCJ220A	1.5SMCJ220CA	GE	BE	220	242	281.6	1.0	1	1	356	4.2

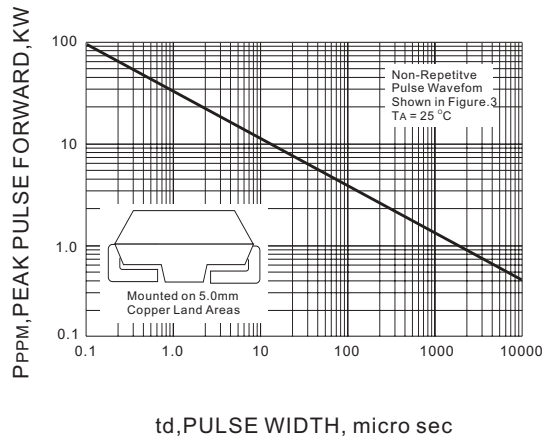


Fig.1 PEAK PULSE POWER RATING CURVE

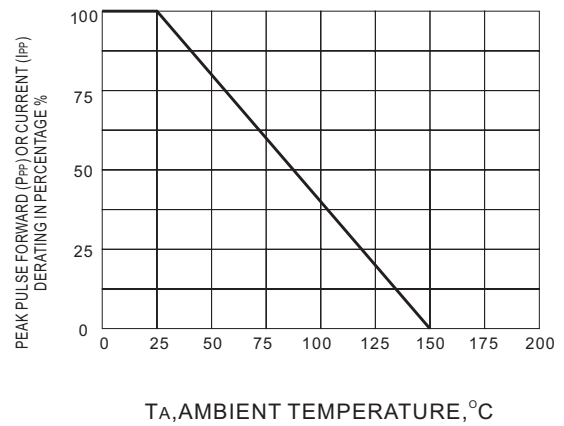


Fig.2 DERATING CURVE

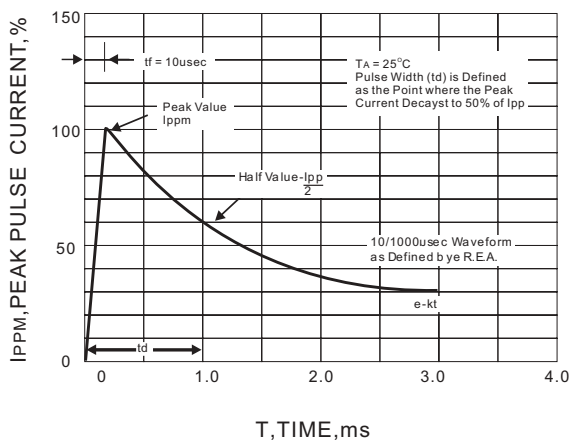


Fig.3 PULSE WAVEFORM

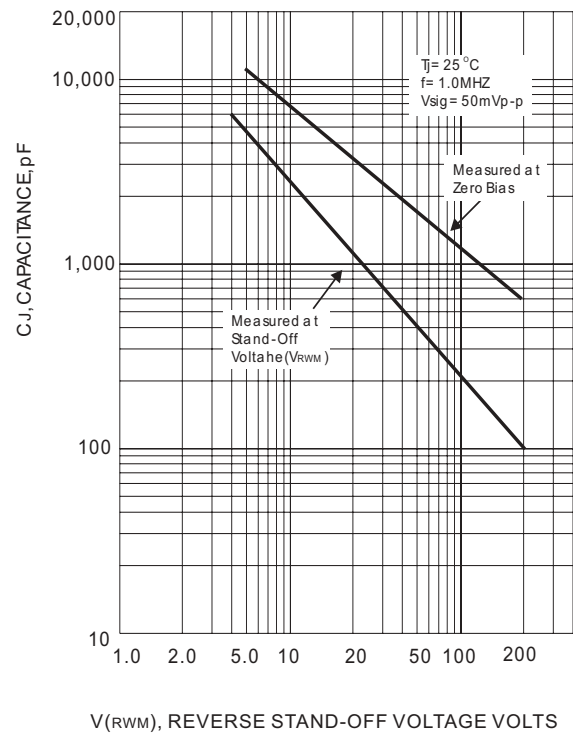


Fig.4 TYPICAL CAPACITANCE

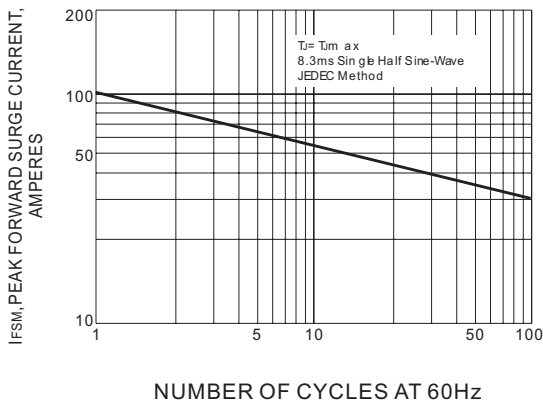
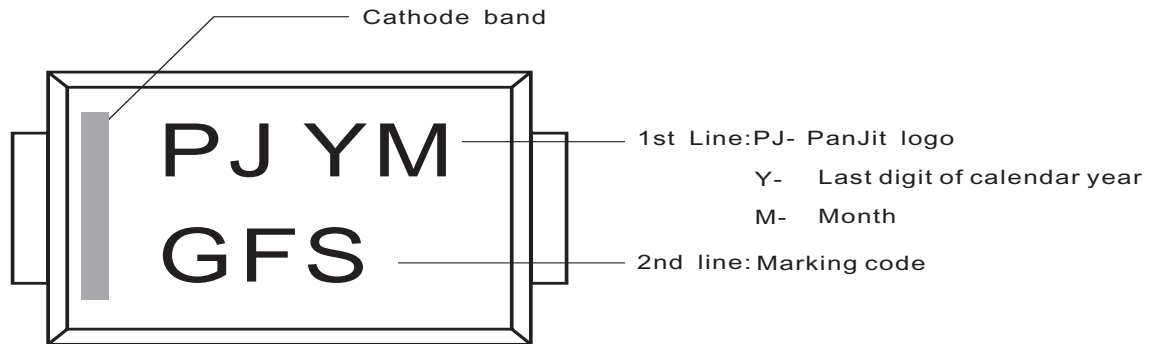


Fig.5 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

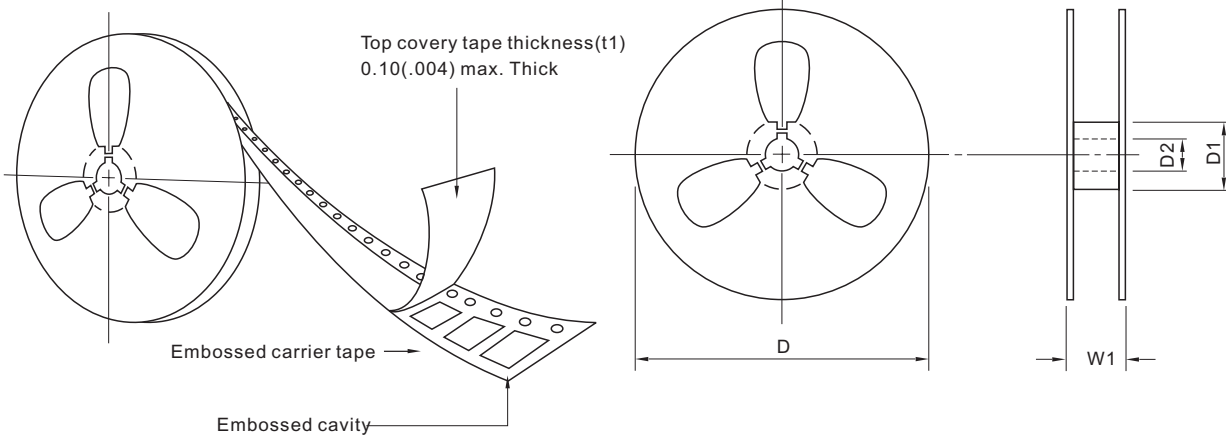
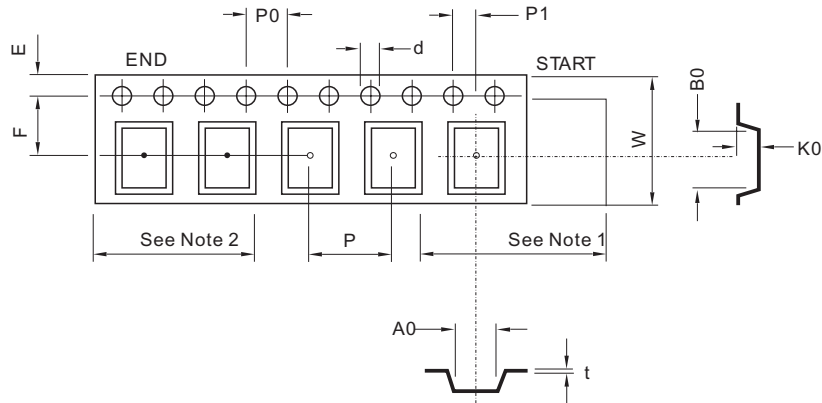


2. MARKING





3. TAPING



SYMBOL	mm(inch)
TYPE SIZE	16.00 (0.629)
Ao	5.99 ± 0.10 (0.235 ± 0.003)
Bo	8.15 ± 0.10 (0.320 ± 0.003)
d	1.55 ± 0.05 (0.06 ± 0.001)
D	330.0 ± 2.0 (13.0 ± 0.078)
D1	50.0 min (1.97 min)
D2	13.0 ± 0.5 (0.51 ± 0.019)
E	1.75 ± 0.10 (0.068 ± 0.003)
F	7.50 ± 0.05 (0.295 ± 0.001)
Ko	2.24 ± 0.10 (0.088 ± 0.003)
P	8.00 ± 0.10 (0.314 ± 0.003)
Po	4.00 ± 0.10 (0.15 ± 0.003)
P1	2.00 ± 0.10 (0.07 ± 0.003)
t	0.32 ± 0.10 (0.012 ± 0.003)
W	16.00 ± 3.00 (0.629 ± 0.118)
W1	16.40~18.40(0.645~0.724)

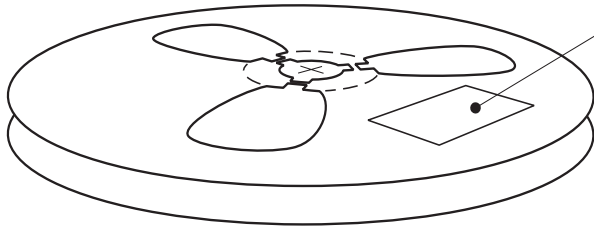
Note:

1. There shall be leader of 230 mm minimum which may consist of carrier and or cover tape follower 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 whit EIA standard EIA-481-A and specifications given above.

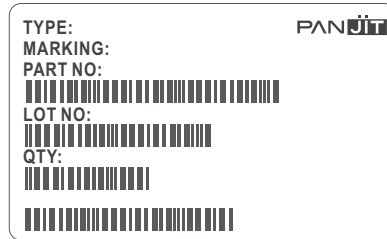


4. PACKING

REEL PACKING

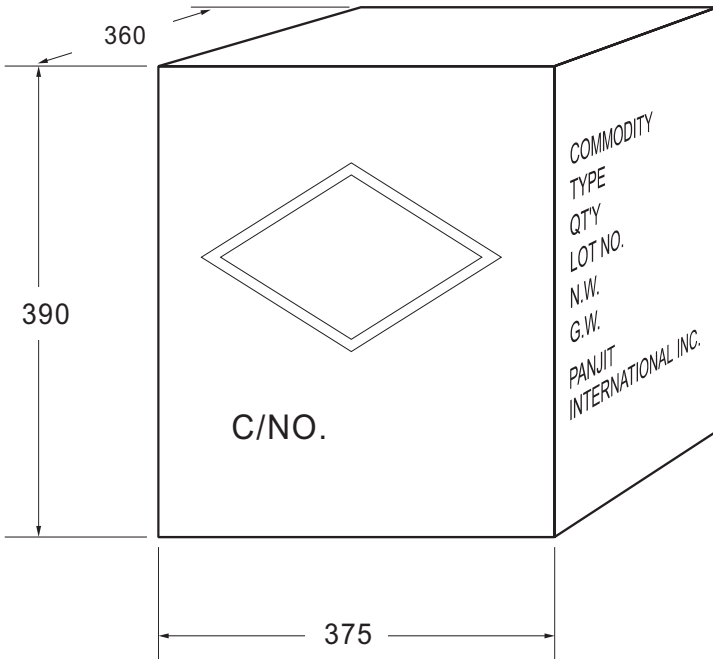


LABEL TYPE



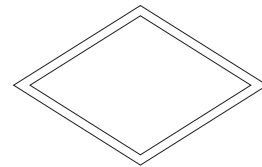
Quantity per Reel: 3,000 pcs

CARTON



Box Dimensions : mm
Quantity per Box: 42,000pcs

SHIPPING MARK



C/NO.
PRODUCT COUNTRY

SIDE MARK

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



Bulk Packing

PACKAGE	INNER SIZE	BOX	CARTON SIZE	CARTON	APPROX. GROSS WEIGHT
	(m/m)	(EA)	(m/m)	(EA)	(Kg)
Bulk Packing					
A-405	198 x 84 x 20	10,000	459 x 214 x 256	50,000	18.2
AM	260 x 190 x 80	1,000	400 x 273 x 415	10,000	15
CM / W	195 x 195 x 40	50	460 x 215 x 260	500	18
CP-15 / 25 / 35	195 x 195 x 40	50	460 x 215 x 260	500	11
CP-3 / 6	260 x 190 x 80	400	400 x 273 x 415	4,000	8.5
CP-8 / 10	260 x 190 x 80	250	400 x 273 x 415	2,500	14
DIP	-	-	495 x 214 x 256	12,000	8.8
DO-15	200 x 85 x 25	1,000	459 x 214 x 256	40,000	17
DO-201AD	200 x 85 x 40	500	495 x 214 x 256	12,500	15.8
DO-201AE	200 x 85 x 40	500	495 x 214 x 256	12,500	15.8
DO-34	96 x 80 x 42	2,000	410 x 335 x 265	120,000	12
DO-35	96 x 80 x 42	2,000	410 x 335 x 265	120,000	13.8
DO-41	240 x 100 x 90	5,000	410 x 335 x 265	60,000	20
DO-41G	96 x 80 x 42	1,000	410 x 335 x 265	60,000	20
FI	208 x 90 x 83	500	490 x 225 x 380	10,000	20.4
FL	270 x 225 x 50	500	463 x 283 x 185	3,000	18.2
GBJ	352 x 337 x 44	800	375 x 360 x 213	3,200	25.4
GBL	350 x 337 x 44	960	375 x 360 x 213	3,840	13.1
GBP	350 x 337 x 44	1,120	375 x 360 x 213	4,480	10.7
GBPC	195 x 195 x 40	50	460 x 215 x 260	500	12
GBPCW	195 x 195 x 40	50	460 x 215 x 260	500	18
GBU	350 x 337 x 44	800	375 x 360 x 213	3,200	17
GL	195 x 195 x 40	80	460 x 215 x 260	800	11
GPJ	500 x 150 x 145	750	572 x 306 x 218	1,500	17
KBJ	219 x 177 x 44	200	367 x 232 x 250	2,000	16.3
KBPC / W	195 x 195 x 40	50	460 x 215 x 260	500	18
KBPM	490 x 150 x 110	1,200	510 x 335 x 240	4,800	19
KBU	270 x 225 x 50	200	463 x 283 x 185	1,200	10
MDI	350 x 337 x 44	6,000	375 x 360 x 390	48,000	14.4
P-600	208 x 90 x 83	500	495 x 214 x 256	5,000	11.9
R-1	198 x 84 x 20	1,000	495 x 214 x 256	50,000	18.2
SDIP	-	-	495 x 214 x 256	24,000	16.8
TO / ITO-220	555 x 145 x 95	2,000	572 x 306 x 218	8,000	19
TO-251AB	560 x 210 x 79	8,400	572 x 306 x 218	33,600	22
TO-247AD	-	-	536 x 243 x 100	1,500	13.2
RB/WOB	258x190x77	1,000	395x270x400	10,000	15.0/17.0
KBP	258x190x77	1,000	395x270x400	10,000	18.0
KBL	230x147x50	200	460x245x275	3,000	17.25
K3/K6	210x115x90	200	600x235x198	2,000	7.3/8.8
K8	210x115x90	200	600x235x198	2,000	13.8
K10/K15/K25/K35/K50M	193x193x46	50	405x210x265	500	17.0
K10/K15/K25/K35/K50P	193x193x46	50	405x210x265	500	12.0
K10/K15/K25/K35/K50W	193x193x46	50	405x210x265	500	17.0



Reel Packing

PACKAGE	REEL	COMPONENT SPACE	TAPE SPACE	REEL DIA	CARTON SIZE	CARTON	APPROX. GROSS WEIGHT
	(pcs)	(m/m)	(m/m)	(m/m)	(m/m)	(EA)	(Kg)
Reel Packing							
A-405	5,000	5.0	52	330	340 x 340 x 410	25,000	11.3
TO-263	2,500	8.0	24	330	375 x360 x 390	35,000	18
DO-15	4,000	5.0	52	330	340 x 340 x 410	20,000	11
DO-201AD	1,250	10.0	52	330	340 x 340 x 410	6,250	9.2
DO-201AE	1,250	10.0	52	330	340 x 340 x 410	6,250	9.2
DO-34	10,000	5.0	52	360	360 x 360 x 395	50,000	9.5
DO-35	10,000	5.0	52	360	360 x 360 x 395	50,000	12
DO-41	5,000	5.0	52	330	360 x 360 x 395	25,000	13
DO-41G	5,000	5.0	52	360	360 x 360 x 395	25,000	13
TO-252	800	16.0	16	330	350 x 337 x 44	6,400	15
MDI	3,000	8.0	12	330	375 x360 x 390	48,000	14.4
MELF/DL-41	5,000	4.0	-	330	350 x 350 x 300	100,000	14
MICRO-MELF	2,500	4.0	-	178	385 x 380 x 260	200,000	13.5
MINI-MELF	10,000 / 2,500	4.0	-	330 / 178	360 x 360 x 395 / 385 x 380 x 260	200,000 / 120,000	14.0 / 13.5
P-600	800	10.0	52	330	340 x 340 x 410	4,000	11
QFN 1.6 x 1.6	4,000	4.0	8	178	390 x 240 x 420	200,000	7.8
R-1	5,000	5.0	52	330	340 x 340 x 410	25,000	6.3
SDIP	1,500	12.0	16	330	375 x360 x 390	21,000	16.3
SMA	7,500 / 1,800	4.0	12	330 / 178	375 x360 x 390 / 390 x 240 x 420	120,000 / 72,000	17.5 / 10
SMB	3,000 / 500	4.0	12	330 / 178	375 x360 x 390 / 390 x 240 x 420	48,000 / 20,000	13.6 / 7.5
SMC	3,000 / 500	12.0	16	330 / 178	375 x360 x 390 / 390 x 240 x 420	42,000 / 15,000	6.2 / 7.3
SOD-123	10,000 / 3,000	4.0	8	330 / 178	375 x 360 x 213 / 390 x 240 x 420	120,000 / 150,000	6.4
SOD-123FL	10,000 / 3,000	4.0	8	330 / 178	375 x 360 x 213 / 390 x 240 x 420	120,000 / 150,000	6.4
SOD-323	12,000 / 5,000	4.0	8	330 / 178	375 x 360 x 213 / 390 x 240 x 420	144,000 / 250,000	10
SOT-23	10,000 / 3,000	4.0	8	330 / 178	375 x 360 x 213 / 390 x 240 x 420	144,000 / 150,000	6.4
SOT-323	10,000 / 3,000	4.0	8	330 / 178	375 x 360 x 213 / 390 x 240 x 420	144,000 / 150,000	6.4
SOT-363	10,000 / 3,000	4.0	8	330 / 178	735 x 365 x 292 / 390 x 240 x 420	300,000 / 150,000	15.66 / 7.0
SOT-353	10,000 / 3,000	4.0	8	330 / 178	735 x 365 x 292 / 390 x 240 x 420	300,000 / 150,000	15.66 / 7.0
TO-92	2,000	-	-	335	390 x 390 x 280	8,000	6.067
SOD-523	12,000 / 5,000	4.0	8	330 / 178	375 x 360 x 213 / 390 x 240 x 420	144,000 / 250,000	10
QFN 2.0 x 2.0	5,000 / 3,000 / 1,000	4.0	8	330 / 178 / 178	553 x 365 x 358 / 333 x 240 x 257 / 333 x 240 x 257	45,000 / 39,000 / 13,000	4.5 / 3.0 / 2.5
SOT23-6L	3,000 / 2,500 / 1,000	4.0	8	330 / 178 / 178	553 x 365 x 358 / 333 x 240 x 257 / 333 x 240 x 257	39,000 / 32,500 / 13,000	3.0 / 3.0 / 2.5
SOIC-08	3,000 / 1,500 / 1,000	4.0	8	330 / 330 / 178	553 x 365 x 358 / 553 x 365 x 358 / 333 x 240 x 257	39,000 / 13,500 / 13,000	6.5 / 5.0 / 3.5



Ammunition Packing

PACKAGE	AMMO	COMPONENT SPACE	TAPE SPACE	BOX SIZE	CARTON SIZE	CARTON	APPROX. GROSS WEIGHT
	(pcs)	(m/m)	(m/m)	(m/m)	(m/m)	(EA)	(Kg)
Ammunition Packing							
A-405	5,000	5	26	255 x 50 x 150	399 x 276 x 330	60,000	16.0
A-405	5,000	5	52	255 x 75 x 150	399 x 276 x 330	40,000	16.0
DO-15	3,000	5	52	255 x 75 x 150	399 x 276 x 330	24,000	11.9
DO-201AD	1,250	10	52	255 x 75 x 150	399 x 276 x 330	10,000	14.0
DO-201AE	1,250	10	52	255 x 75 x 150	399 x 276 x 330	10,000	14.0
DO-34	5,000	5	26	248 x 80 x 48	410 x 335 x 265	150,000	15.5
DO-34	5,000	5	52	248 x 80 x 75	410 x 335 x 265	100,000	14.1
DO-35	5,000	5	26	248 x 80 x 48	410 x 335 x 265	150,000	20.0
DO-35	5,000	5	52	248 x 80 x 75	410 x 335 x 265	100,000	15.7
DO-41	5,000	5	52	255 x 75 x 150	399 x 276 x 330	40,000	19.1
DO-41G	2,500	5	26	248 x 80 x 48	410 x 335 x 265	75,000	21.5
DO-41G	2,500	5	52	248 x 80 x 75	410 x 335 x 265	50,000	19.0
P-600	400	10	52	255 x 75 x 150	399 x 276 x 330	3,200	9.0
R-1	5,000	5	26	255 x 50 x 150	399 x 276 x 330	40,000	16.0
R-1	5,000	5	52	255 x 75 x 150	399 x 276 x 330	40,000	16.0



5. HIGH RELIABILITY TESTING SPEC.

NO	TEST ITEM	TEST CONDITION	REFERENCE DOCUMENT	LOT QUALITY LEVEL	REMARK
1	TEMPERATURE CYCLING (T.C.T)	Ta= -55+0,-3°C 10min Ta= +150+/-°C 10min FOR 20 CYCLE	MIL - STD - 750D METHOD - 1051.5	LTPD 10 S.s.=22 ACCEPT FOR 0 FAILURE ONLY.	
2	HIGH TEMPERATURE STORAGE LIFE (H.T.S.L)	Ta=150 +/- 5°C TESTING TIME: 168HRS 250HRS 500HRS	MIL-STD-750D METHOD-1031.2	LTPD10 S.s.=22 ACCEPT FOR 0 FAILURE ONLY.	
3	SOLDERABILITY TEST	TEMPERATURE OF SOLDER POT=260 +/- 5 TIME FOR DIPPING FLUX=5-10SEC TIME FOR DIPPING IN SOLDER=5+/-0.5SEC DIPPING DEPTH=0.05 inch max FOR ONE CYCLE	MIL-STD-750D	METHOD-2026.10 LTPD 7 S.s.=32 ACCEPT FOR 0 FAILURE ONLY.	
4	HIGH TEMPERATURE REVERSE BIAS (H.T.R.B)	Ta=150 +/- 5°C VR=80%VR(CUSTOM SECP) TESTING TIME: 48HRS 96HRS 168HRS 250HRS 500HRS	MIL-STD-750D METHOD-1038.3	LTPD10 S.s.=22 ACCEPT FOR 0 FAILURE ONLY.	
5	CONTINUE FORWARD OPERATING LIFE (C.F.O.L)	Ta=55 °C I=IO +/-10% TESTING TIME: 168HRS 250HRS 500HRS	MIL-STD-750D METHOD-1027.3	LTPD10 S.s.=22 ACCEPT FOR 0 FAILURE ONLY.	
6	THERMAL SHOCK (T.S.T)	HOT TANK T=100°C+10/-2°C t=5min COLD TANK T=0°C+2/-10°C t=5min 15 CYCLE TIME BETWEEN TRANSFERRING DO'NOT EXCEED 10 SECOND.	MIL-STD-750D METHOD-1056.7	LTPD10 S.s.=22 ACCEPT FOR 0 FAILURE ONLY.	
7	PRESSURE COOKER (P.C.T)	Ta=121°C P=1.2kg/cm ² TIME=96HRS	JEDEC JESD22-A102-C	LTPD10 S.s.=22 ACCEPT FOR 0 FAILURE ONLY.	
8	INTERMITTENT FORWARD OPERATING LIFE (I.F.O.L)	I = Io x 1.0 POWER ON : 30SEC POWER OFF : 50SEC TESTING TIME: 2000 CYCLES	MIL-STD-750D METHOD 1036.3	LTPD10 S.s.=22 ACCEPT FOR 0 FAILURE ONLY.	
9	FORWARD SURGE CURRENT (I.F.S.M)	SQ WAVE OR SINE WAVE IFSM=DATE SHEET SPEC. TIME=8.3Msec T=1 CYCLE	MIL-STD-750D METHOD 4066.3	LTPD10 S.s.=22 ACCEPT FOR 0 FAILURE ONLY.	
10	HUMIDITY	Ta=85°C RH=85% TESTING TIME: 168HRS 250HRS 500HRS	MIL-STD-750D METHOD 1021.1	LTPD10 S.s.=22 ACCEPT FOR 0 FAILURE ONLY.	
11	SOLDERABILITY RESISTANCE	TEMPERATURE OF SOLDER POT =260+/-5°C TIME FOR DIPPING IN SOLDER =10+2/-0 SEC DIPPING DEPTH=1.57+0.79 mm BELOW BODY FOR ONE CYCLE	MIL-STD-750D METHOD 2031.1	LTPD10 S.s.=22 ACCEPT FOR 0 FAILURE ONLY.	

SCHOTTKY PRODUCT TESTING TEMPERATURE 125 °C MAX(NORMAL)