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5KP SERIES

GLASS PASSIVATED JUNCTION TRANSIENT VOLTAGE SUPPRESSOR PEAK PULSE POWER 5000 Watts

STAND-OFF VOLTAGE

5 to 220 Volts

P-600

Unit : inch(mm)

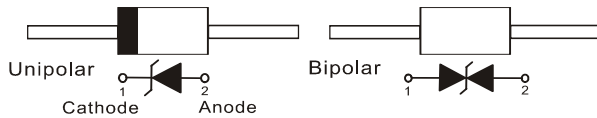
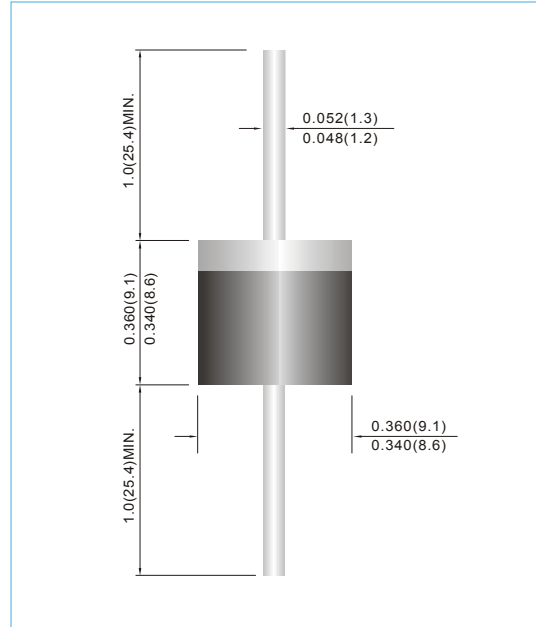
Recognized File # E210467

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- 5000W Peak Pulse Power capability at on 10/1000µs waveform
- Excellent clamping capability
- Low zener impedance
- Repetition rate(Duty Cycle):.05%
- Fast response time: typically less than 1.0 ps from 0 volts to BV min
- Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- Case: JEDEC P-600 molded plastic
- Terminals: Axial leads, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 1.75 ounce, 0.0617 gram



DEVICES FOR BIPOLAR APPLICATIONS

For Bidirectional use C or CA Suffix for types 5KP5.0 thru types 5KP200

Electrical characteristics apply in both directions.

MAXIMUM RATINGS AND CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Rating	Symbol	Value	Units
Peak Power Dissipation at $T_A=25^\circ\text{C}$, $T_p=1\text{ms}$ (Notes 1)	P_{PP}	5000	Watts
Typical Thermal Resistance Junction to Air Lead Lengths .375", (9.5mm) (Notes 2)	$R_{\theta JA}$	10	$^\circ\text{C} / \text{W}$
Peak Pulse Current on 10/1000µs waveform (Notes 1)	I_{PPM}	see Table	Amps
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JECED Method) (Notes 3)	I_{FSM}	400	Amps
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +175	$^\circ\text{C}$

NOTES :

- 1.Non-repetitive current pulse, per Fig. 3 and derated above $T_A=25^\circ\text{C}$ per Fig. 2.
- 2.Mounted on Copper Leaf area of $0.79\text{in}^2(20\text{mm}^2)$.
- 3.8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.
- 4.A transient suppressor is selected according to the working peak reverse voltage (V_{RWM}), which should be equal to or greater than the DC or continuous peak operating voltage level.

5KP SERIES

Part Number		Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Reverse Leakage		Max. Clamp Voltage 10/1000µs	Peak Pulse Current 10/1000µs	Marking Code	
			V _{BR} @ I _T			I _R @ V _{RWM}					
			Min.	Max.		UNI	BI				
UNI	BI	V	V	V	mA	µA	µA	V	A	UNI	BI
5000W Transient Voltage Suppressor											
5KP5.0	5KP5.0C	5	6.4	7.55	50	5000	10000	9.6	520	5KP5.0	5KP5.0C
5KP5.0A	5KP5.0CA	5	6.4	7.25	50	5000	10000	9.2	543	5KP5.0A	5KP5.0CA
5KP6.0	5KP6.0C	6	6.67	8.45	50	5000	10000	11.4	439	5KP6.0	5KP6.0C
5KP6.0A	5KP6.0CA	6	6.67	7.67	50	5000	10000	10.3	485	5KP6.0A	5KP6.0CA
5KP6.5	5KP6.5C	6.5	7.22	9.14	50	2000	4000	12.3	407	5KP6.5	5KP6.5C
5KP6.5A	5KP6.5CA	6.5	7.22	8.3	50	2000	4000	11.2	447	5KP6.5A	5KP6.5CA
5KP7.0	5KP7.0C	7	7.78	9.86	50	1000	2000	13.3	378	5KP7.0	5KP7.0C
5KP7.0A	5KP7.0CA	7	7.78	8.95	50	1000	2000	12	417	5KP7.0A	5KP7.0CA
5KP7.5	5KP7.5C	7.5	8.33	10.67	5	250	500	14.3	350	5KP7.5	5KP7.5C
5KP7.5A	5KP7.5CA	7.5	8.33	9.58	5	250	500	12.9	388	5KP7.5A	5KP7.5CA
5KP8.0	5KP8.0C	8	8.89	11.3	5	150	300	15	333	5KP8.0	5KP8.0C
5KP8.0A	5KP8.0CA	8	8.89	10.23	5	150	300	13.6	367	5KP8.0A	5KP8.0CA
5KP8.5	5KP8.5C	8.5	9.44	11.92	5	50	100	15.9	314	5KP8.5	5KP8.5C
5KP8.5A	5KP8.5CA	8.5	9.44	10.82	5	50	100	14.4	347	5KP8.5A	5KP8.5CA
5KP9.0	5KP9.0C	9	10	12.6	5	20	40	16.9	295	5KP9.0	5KP9.0C
5KP9.0A	5KP9.0CA	9	10	11.5	5	20	40	15.4	325	5KP9.0A	5KP9.0CA
5KP10	5KP10C	10	11.1	14.1	5	6	6	18.8	266	5KP10	5KP10C
5KP10A	5KP10CA	10	11.1	12.8	5	6	6	17	294	5KP10A	5KP10CA
5KP11	5KP11C	11	12.2	15.4	5	6	6	20.1	249	5KP11	5KP11C
5KP11A	5KP11CA	11	12.2	14	5	6	6	18.2	274	5KP11A	5KP11CA
5KP12	5KP12C	12	13.3	16.9	5	6	6	22	227	5KP12	5KP12C
5KP12A	5KP12CA	12	13.3	15.3	5	6	6	19.9	251	5KP12A	5KP12CA
5KP13	5KP13C	13	14.4	18.2	5	6	6	23.8	210	5KP13	5KP13C
5KP13A	5KP13CA	13	14.4	16.5	5	6	6	21.5	232	5KP13A	5KP13CA
5KP14	5KP14C	14	15.6	19.8	5	6	6	25.8	194	5KP14	5KP14C
5KP14A	5KP14CA	14	15.6	17.9	5	6	6	23.2	215	5KP14A	5KP14CA
5KP15	5KP15C	15	16.7	21.1	5	6	6	26.9	188	5KP15	5KP15C
5KP15A	5KP15CA	15	16.7	19.2	5	6	6	24.4	206	5KP15A	5KP15CA
5KP16	5KP16C	16	17.8	22.6	5	6	6	28.8	176	5KP16	5KP16C
5KP16A	5KP16CA	16	17.8	20.5	5	6	6	26	192	5KP16A	5KP16CA
5KPJ17	5KPJ17C	17	18.9	23.9	5	6	6	30.5	164	5KPJ17	5KPJ17C
5KP17A	5KP17CA	17	18.9	21.7	5	6	6	27.6	181	5KP17A	5KP17CA
5KP18	5KP18C	18	20	25.3	5	6	6	32.2	155	5KP18	5KP18C
5KP18A	5KP18CA	18	20	23.3	5	6	6	29.2	172	5KP18A	5KP18CA
5KP20	5KP20C	20	22.2	28.1	5	6	6	35.8	139	5KP20	5KP20C
5KP20A	5KP20CA	20	22.2	25.5	5	6	6	32.4	154	5KP20A	5KP20CA
5KP22	5KP22C	22	24.4	30.9	5	6	6	39.4	127	5KP22	5KP22C
5KP22A	5KP22CA	22	24.4	28	5	6	6	35.5	141	5KP22A	5KP22CA
5KP24	5KP24C	24	26.7	33.8	5	6	6	43	116	5KP24	5KP24C
5KP24A	5KP24CA	24	26.7	30.7	5	6	6	38.9	128	5KP24A	5KP24CA
5KP26	5KP26C	26	28.9	36.6	5	6	6	46.6	107	5KP26	5KP26C
5KP26A	5KP26CA	26	28.9	33.2	5	6	6	42.1	119	5KP26A	5KP26CA
5KP28	5KP28C	28	31.1	39.4	5	6	6	50	99	5KP28	5KP28C
5KP28A	5KP28CA	28	31.1	35.8	5	6	6	45.4	110	5KP28A	5KP28CA
5KP30	5KP30C	30	33.3	42.2	5	6	6	53.5	93	5KP30	5KP30C
5KP30A	5KP30CA	30	33.3	38.3	5	6	6	48.4	103	5KP30A	5KP30CA
5KP33	5KP33C	33	36.7	46.5	5	6	6	59	85	5KP33	5KP33C
5KP33A	5KP33CA	33	36.7	42.2	5	6	6	53.3	94	5KP33A	5KP33CA
5KP36	5KP36C	36	40	50.7	5	6	6	64.3	78	5KP36	5KP36C
5KP36A	5KP36CA	36	40	46	5	6	6	58.1	85	5KP36A	5KP36CA
5KP40	5KP40C	40	44.4	56.3	5	6	6	71.4	70	5KP40	5KP40C

5KP SERIES

Part Number		Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Reverse Leakage		Max. Clamp Voltage 10/1000µs	Peak Pulse Current 10/1000µs	Marking Code		
		V _{RWM} (Notes 4)	V _{BR} @ I _T		I _T	I _R @ V _{RWM}		V _C @ I _{PP}	I _{PP}			
UNI	BI		V	Min. V		Max. V	mA			UNI µA	BI µA	V
5000W Transient Voltage Suppressor												
5KP40A	5KP40CA	40	44.4	51.1	5	6	6	64.5	78	5KP40A	5KP40CA	
5KP43	5KP43C	43	47.8	60.5	5	6	6	76.7	65	5KP43	5KP43C	
5KP43A	5KP43CA	43	47.8	54.9	5	6	6	69.4	72	5KP43A	5KP43CA	
5KP45	5KP45C	45	50	63.3	5	6	6	80.3	62	5KP45	5KP45C	
5KP45A	5KP45CA	45	50	57.5	5	6	6	72.7	69	5KP45A	5KP45CA	
5KP48	5KP48C	48	53.3	67.5	5	6	6	85.5	58	5KP48	5KP48C	
5KP48A	5KP48CA	48	53.3	61.3	5	6	6	77.4	65	5KP48A	5KP48CA	
5KP51	5KP51C	51	56.7	71.8	5	6	6	91.1	55	5KP51	5KP51C	
5KP51A	5KP51CA	51	56.7	65.2	5	6	6	82.4	61	5KP51A	5KP51CA	
5KP54	5KP54C	54	60	76	5	6	6	96.3	52	5KP54	5KP54C	
5KP54A	5KP54CA	54	60	69	5	6	6	87.1	57	5KP54A	5KP54CA	
5KP58	5KP58C	58	64.4	81.6	5	6	6	103	49	5KP58	5KP58C	
5KP58A	5KP58CA	58	64.4	74.1	5	6	6	93.6	53	5KP58A	5KP58CA	
5KP60	5KP60C	60	66.7	84.5	5	6	6	107	47	5KP60	5KP60C	
5KP60A	5KP60CA	60	66.7	76.7	5	6	6	96.8	52	5KP60A	5KP60CA	
5KP64	5KP64C	64	71.1	90.1	5	6	6	114	44	5KP64	5KP64C	
5KP64A	5KP64CA	64	71.1	81.8	5	6	6	103	49	5KP64A	5KP64CA	
5KP70	5KP70C	70	77.8	98.6	5	6	6	125	40	5KP70	5KP70C	
5KP70A	5KP70CA	70	77.8	89.5	5	6	6	113	44	5KP70A	5KP70CA	
5KP75	5KP75C	75	83.3	105.7	5	6	6	134	37	5KP75	5KP75C	
5KP75A	5KP75CA	75	83.3	95.8	5	6	6	121	41	5KP75A	5KP75CA	
5KP78	5KP78C	78	86.7	109.8	5	6	6	139	36	5KP78	5KP78C	
5KP78A	5KP78CA	78	86.7	99.7	5	6	6	126	40	5KP78A	5KP78CA	
5KP85	5KP85C	85	94.4	119.2	5	6	6	151	33	5KP85	5KP85C	
5KP85A	5KP85CA	85	94.4	108.2	5	6	6	137	36	5KP85A	5KP85CA	
5KP90	5KP90C	90	100	126.5	5	6	6	160	31	5KP90	5KP90C	
5KP90A	5KP90CA	90	100	115.5	5	6	6	146	34	5KP90A	5KP90CA	
5KP100	5KP100C	100	111	141	5	6	6	179	28	5KP100	5KP100C	
5KP100A	5KP100CA	100	111	128	5	6	6	162	31	5KP100A	5KP100CA	
5KP110	5KP110C	110	122	154.5	5	6	6	196	26	5KP110	5KP110C	
5KP110A	5KP110CA	110	122	140.5	5	6	6	177	28	5KP110A	5KP110CA	
5KP120	5KP120C	120	133	169	5	6	6	214	23	5KP120	5KP120C	
5KP120A	5KP120CA	120	133	153	5	6	6	193	20	5KP120A	5KP120CA	
5KP130	5KP130C	130	144	182.5	5	6	6	231	22	5KP130	5KP130C	
5KP130A	5KP130CA	130	144	165.5	5	6	6	209	24	5KP130A	5KP130CA	
5KP150	5KP150C	150	167	211.5	5	6	6	268	19	5KP150	5KP150C	
5KP150A	5KP150CA	150	167	192.5	5	6	6	243	21	5KP150A	5KP150CA	
5KP160	5KP160C	160	178	226	5	6	6	287	17	5KP160	5KP160C	
5KP160A	5KP160CA	160	178	205	5	6	6	259	19	5KP160A	5KP160CA	
5KP170	5KP170C	170	189	239.5	5	6	6	304	16	5KP170	5KP170C	
5KP170A	5KP170CA	170	189	217.5	5	6	6	275	18	5KP170A	5KP170CA	
5KP180	5KP180C	180	198	253.8	1	3	3	322	16	5KP180	5KP180C	
5KP180A	5KP180CA	180	198	230.4	1	3	3	292	17	5KP180A	5KP180CA	
5KP190	5KP190C	190	209	267.9	1	3	3	340	15	5KP190	5KP190C	
5KP190A	5KP190CA	190	209	243.2	1	3	3	308	16	5KP190A	5KP190CA	
5KP200	5KP200C	200	220	282	1	3	3	358	14	5KP200	5KP200C	
5KP200A	5KP200CA	200	220	256	1	3	3	324	15	5KP200A	5KP200CA	
5KP210	5KP210C	210	231	296.1	1	3	3	376	13	5KP210	5KP210C	
5KP210A	5KP210CA	210	231	268.8	1	3	3	340	15	5KP210A	5KP210CA	
5KP220	5KP220C	220	242	310.2	1	3	3	394	13	5KP220	5KP220C	
5KP220A	5KP220CA	220	242	282	1	3	3	356	14	5KP220A	5KP220CA	



5KP SERIES

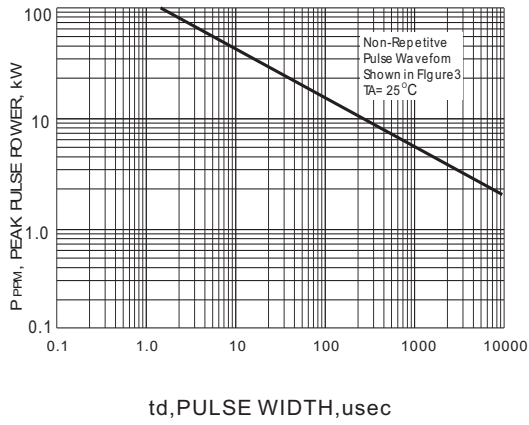


Fig.1 PEAK PULSE POWER RATING VERSUS PULSE TIME CURVE

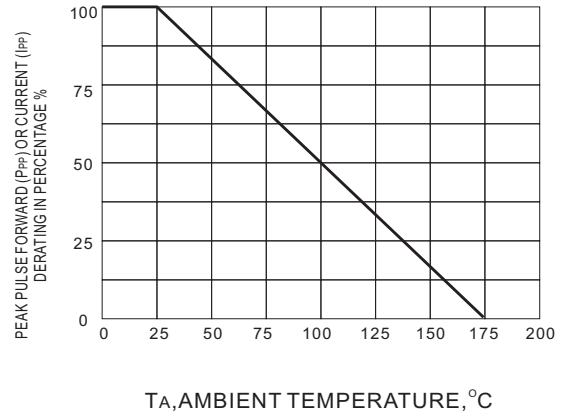


Fig.2 PULSE DERATING CURVE

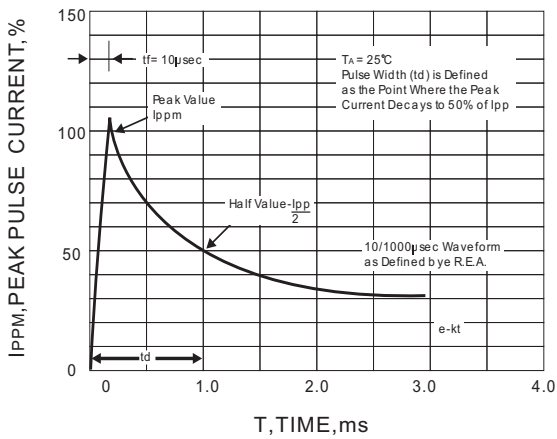


Fig.3 PULSE WAVEFORM

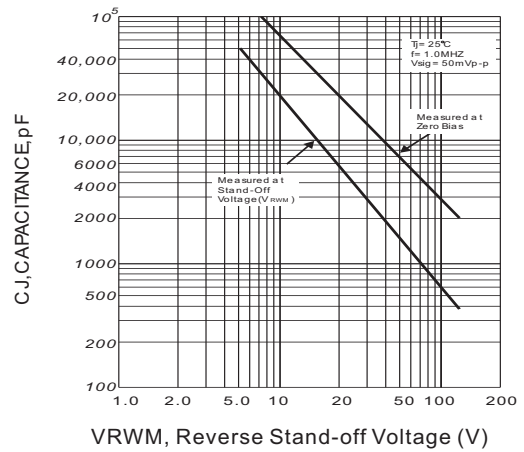


Fig.4 TYPICAL JUNCTION CAPACITANCE

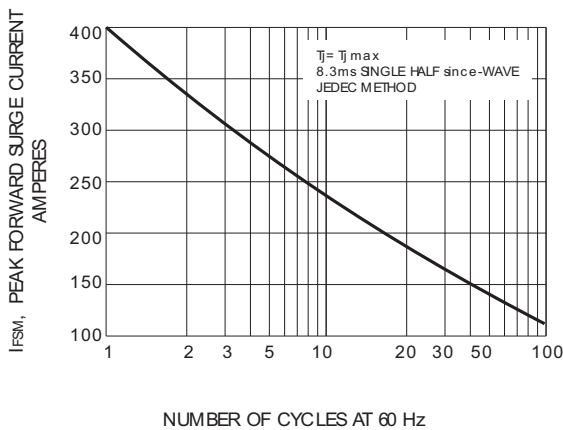


Fig.5 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT UNIDIRECTIONAL



5KP SERIES

Part No_packing code_Version

- 5KP5.0_AY_00001
- 5KP5.0_AY_10001
- 5KP5.0_B0_00001
- 5KP5.0_B0_10001
- 5KP5.0_R2_00001
- 5KP5.0_R2_10001

For example :

RB500V-40_R2_00001



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



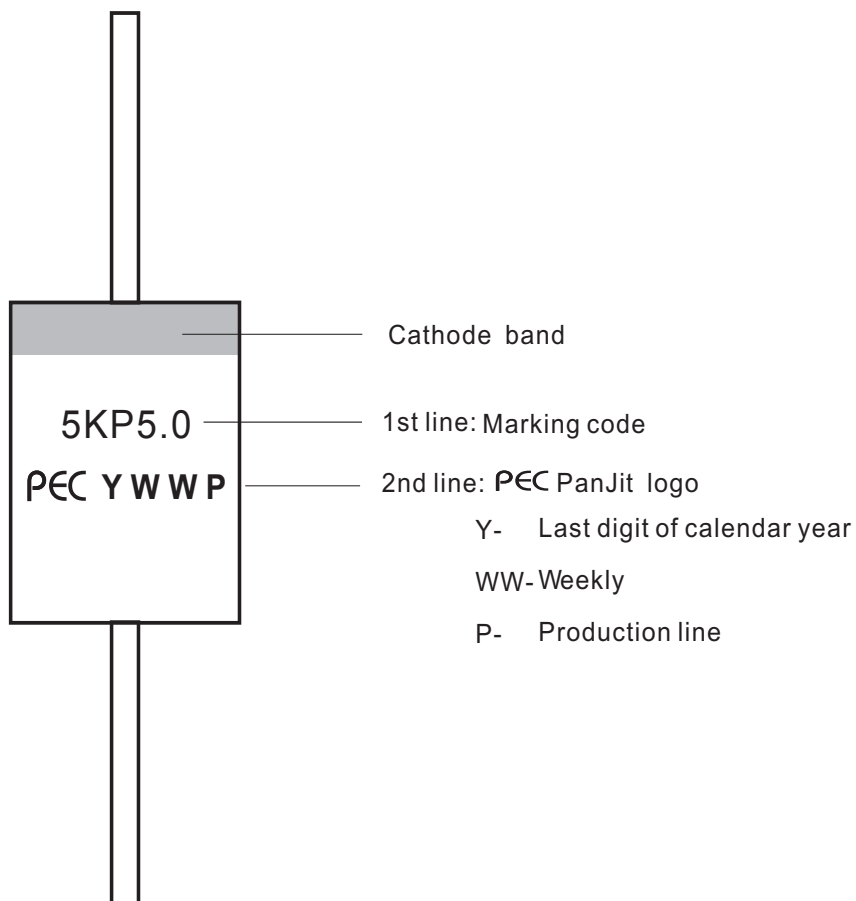
5KP SERIES

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2. MARKING

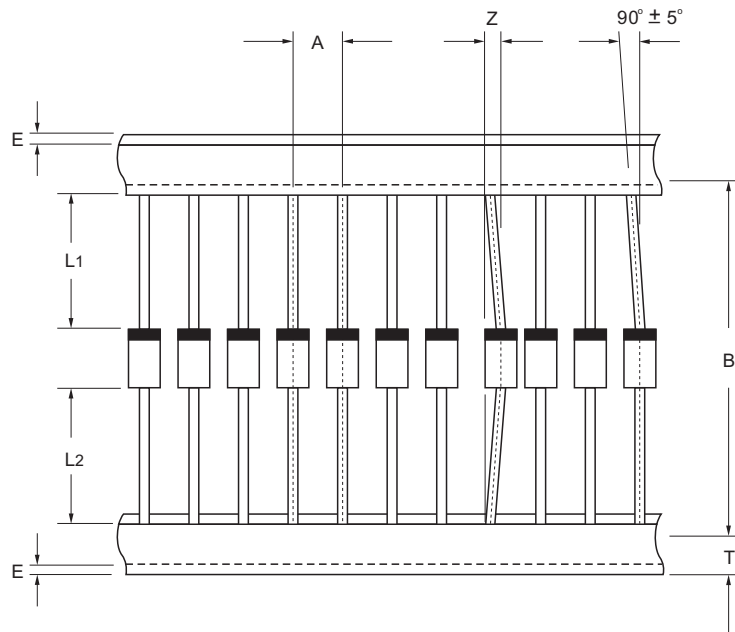




3. TAPING

Axial lead devices are packed in accordance with EIA standard RS-296-E and specifications given below.

COMPONENT OUTLINE	COMPONENT PITCH A ± 0.5mm	INTER TAPE PITCH B ± 1.0mm	CUMULATIVE PITCH TOLERANCE
P600	10.0mm	52.0mm	1.0mm/20pitch



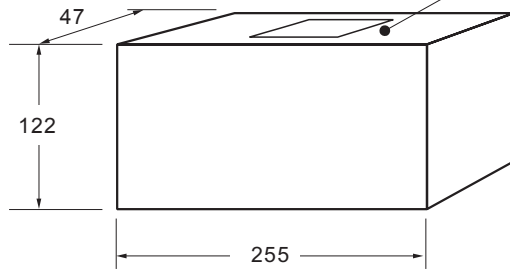
ITEM	SYMBOL	SPECIFICATIONS(mm)	SPECIFICATIONS(inch)
Component alignment	Z	1.2max	0.048max
Tape width	T	6.0±0.4	0.236±0.016
Exposed adhesive	E	0.8max	0.032max
Body eccentricity	L1-L2	1.0max	0.040max

NOTES: Each component lead shall be sandwiched between tapes for a minimum of 3.2mm (0.126")



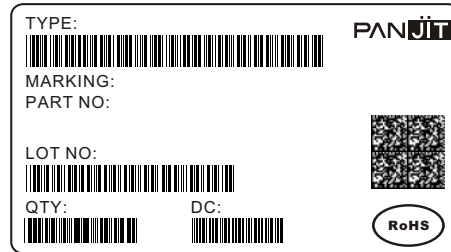
4. PACKING

AMMUNITION PACKING

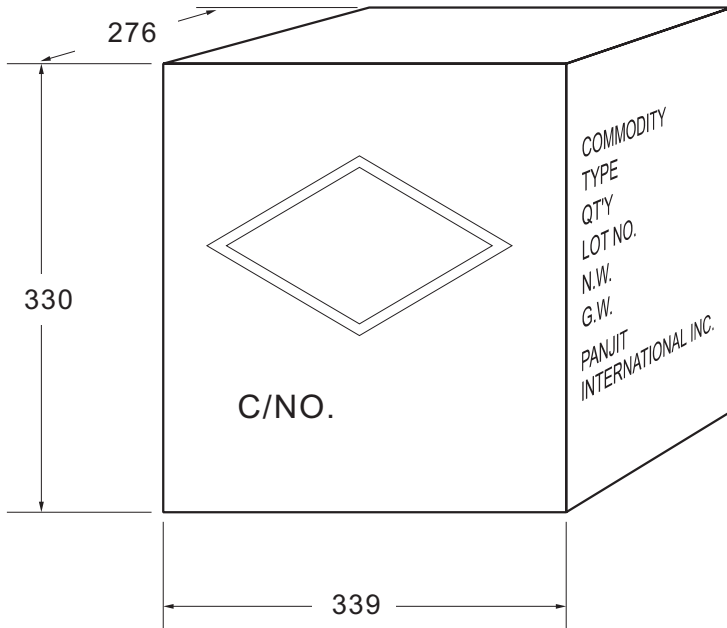


Box Dimensions : mm
Quantity per Box: 400 pcs

LABEL TYPE

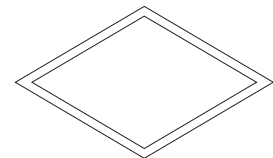


CARTON



Box Dimensions : mm
Quantity per Box: 3,200 pcs

SHIPPING MARK



C/NO.
PRODUCTCOUNTRY

SIDE MARK

COMMODITY:
TYPE:
QTY:
LOTNO.
N.W.
G.W.
PANJIT
INTERNATIONALINC.



Packing Specifications

Package	Reel Size	Reel	Component Space	Tape Space	Reel Dia	Carton Size	Carton	Approx. Gross Weight
	(inch)	(pcs)	(m/m)	(m/m)	(m/m)	(m/m)	(EA)	(Kg)
Reel Packing								
DFN 0603	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
DFN1616-8L	7	5,000	4	8	178	390 x 270 x 400	400,000	10.4
	13	12,000	4	8	330	375 x 360 x 230	144,000	7.6
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-563	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-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	10.2
	13	10,000	4	8	330	375 x 360 x 230	120,000	7.1
SOT-363 (ESD)	7	3,000	4	8	178	455 x 270 x 440	240,000	10
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-323 (ESD)	7	3,000	4	8	178	455 x 270 x 440	240,000	9.4
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



Packing Specifications

Package	Reel Size	Reel	Component Space	Tape Space	Reel Dia	Carton Size	Carton	Approx. Gross Weight
	(inch)	(pcs)	(m/m)	(m/m)	(m/m)	(m/m)	(EA)	(Kg)
Reel Packing								
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-23 (ESD)	7	3,000	4	8	178	455 x 270 x 440	240,000	9.9
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	13	10,000	4	-	330	360 x 360 x 395	200,000	14.9
	7	2,500	4	-	178	385 x 380 x 260	200,000	13.3
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/DPAK	13	3,000	8	16	330	375 x 360 x 422	42,000	18.8
TO-263/D ² 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
	(m/m)	(EA)	(m/m)	(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	495 x 214 x 256	12,500	16
P-600	208 x 90 x 83	500	459 x 214 x 256	5,000	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-220	540 x 145 x 85	2,000	555 x 306 x 200	8,000	22.9
ITO-220	540 x 145 x 85	2,000	555 x 306 x 200	8,000	20.5
TO-251AB/DPAK	555 x 145 x 95	8,400	572 x 306 x 218	33,600	22
TO-3PN	-	-	600x185x230	1,800	16.4
TO-247AD/TO-3P	-	-	530 x 243 x 100	1,500	13.9
TO-247S/TO-3PS	-	-	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
	(m/m)	(pcs)	(m/m)	(m/m)	(m/m)	(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
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 : 2013.02.22 rev.02

NO.	TEST ITEM	TEST CONDITION	REFERENCED DOCUMENT	LOT QUALITY LEVEL
1	TEMPERATURE CYCLING (T.C.T) 溫度循環試驗	Ta = -55 + 0°C / -10°C 10min(Min) Ta = +150 + 15°C / -0°C 10min(Min) FOR 20CYCLES	MIL-STD-750D METHOD-1051.5 Condition G	LTPD 10 S.S=22 ACCEPT FOR 0 FAILURE ONLY.
2	HIGH TEMPERATURE STORAGE LIFE (H.T.S.L) 高溫儲存壽命試驗	Ta = Storage Temperature Range (device specified maximum temperature)	MIL-STD-750D METHOD-1032.2	LTPD 10 S.S=22 ACCEPT FOR 0 FAILURE ONLY.
3	SOLDERABILITY TEST 錫錫性試驗	Temperature of Solder TEMPERATURE OF SOLDER POT = 245 + / - 5°C TIME FOR DIPPING IN SOLDER = 5 + / - 0.5 SEC DIPPING DEPTH = 0.05inch max from the body 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) 高溫逆向偏壓	Tj ≤ Tj max VR = 0.8VR (CUSTOMER SPEC.) DC supply	MIL-STD-750D METHOD-1038.3	LTPD 10 S.S=22 ACCEPT FOR 0 FAILURE ONLY.
5	CONTINUE FORWARD OPERATING LIFE (C.F.O.L) 連續通電	Ta = 25°C I = Io + / - 10% DC supply	MIL-STD-750D METHOD 1027.3	LTPD 10 S.S=22 ACCEPT FOR 0 FAILURE ONLY.
6	THERMAL SHOCK (T.S.T) 冷熱衝擊試驗	HOT TANK Ta = 100 + 10 / - 2°C t = 5min COLD TANK Ta = 0 + 2 / - 10°C t = 5min 15 CYCLES TIME BETWEEN TRANSFERRING DO NOT EXCEED 10 SEC	MIL-STD-750D METHOD 1056.7	LTPD 10 S.S=22 ACCEPT FOR 0 FAILURE ONLY.
7	PRESSURE COOKER (P.C.T) 壓力鍋試驗	Ta = 121°C P = 29.7psia / 205kPa or 2.088kg/cm ² Relative Humidity = 100%	JEDEC JESD22-A102-C	LTPD 10 S.S=22 ACCEPT FOR 0 FAILURE ONLY.
8	INTERMITTENT FORWARD OPERATING LIFE (I.F.O.L) 斷續通電	I = Io × 1.0 DC supply POWER ON: at least 30 SEC POWER OFF: 50 SEC TESTING CYCLE: 2000CYCLES	MIL-STD-750D METHOD 1036.3	LTPD 10 S.S=22 ACCEPT FOR 0 FAILURE ONLY.
9	FORWARD SURGE CURRENT 順向突波電流測試	SQ WAVE OR SINE WAVE IFSM = DATE SHEET SPEC. TIME = DATE SHEET SPEC. T = 1 CYCLE	MIL-STD-750D METHOD 4066-3	LTPD 10 S.S=22 ACCEPT FOR 0 FAILURE ONLY.
10	HUMIDITY 恆溫濕試驗	Ta = 85 + / - 2°C RH = 85 + / - 5%	EIAJ ED-4701 METHOD 103	LTPD 10 S.S=22 ACCEPT FOR 0 FAILURE ONLY.
11	SOLDER RESISTANCE 錫錫耐熱性試驗	TEMPERATURE OF SOLDER POT = 260 + / - 5°C TIME FOR DIPPING IN SOLDER = 10 + 2 / - 0 SEC DIPPING DEPTH = 1.57 + / - 0.79mm FROM THE BODY FOR ONE CYCLE	MIL-STD-750D METHOD 2031.2	LTPD 10 S.S=22 ACCEPT FOR 0 FAILURE ONLY.