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REVISIONS				DOC. NO. SPC-F004, Total Pages: 2 Effective: 7/15/97. DCP No: 229 Supersedes DCP No: 103				
DCP #	REV	DESCRIPTION	DRAWN	DATE	CHECKD	DATE	APPRVD	DATE
139	A	RELEASED	JWM	7/23/97	J.C.	7/23/97	B.B.	8/1/97
512	B	ADD P6KE24C	DJC	4/27/98	JC	4/27/98	JC	4/27/98

Part No.	Reverse Stand-Off Voltage VRWM (V)	Breakdown Voltage VBR (V) Min @ IT	Breakdown Voltage VBR (V) Max @ IT	Test Current IT (mA)	Maximum Clamping Voltage @Ipp Vc (V)	Peak Pulse Current Ipp (A)	Reverse Leakage @VRWM IR (uA)
P6KE100A	85.50	95.00	105.00	1	137.0	4.4	5
P6KE100C	81.00	90.00	110.00	1	144.0	4.2	5
P6KE10A	8.55	9.50	10.50	1	14.5	41.0	10
P6KE10C	8.10	9.00	11.00	1	15.0	40.0	20
P6KE12A	10.20	11.40	12.60	1	16.7	36.0	5
P6KE12C	9.72	10.80	13.20	1	17.3	35.0	5
P6KE12CA	10.20	11.40	12.60	1	16.7	36.0	5
P6KE15A	12.80	14.30	15.80	1	21.2	28.0	5
P6KE15C	12.10	13.50	16.50	1	22.0	27.0	5
P6KE16A	13.60	15.20	16.80	1	22.5	27.0	5
P6KE16C	12.90	14.40	17.60	1	23.5	26.0	5
P6KE18A	15.30	17.10	18.90	1	25.2	24.0	5
P6KE18C	14.50	16.20	19.80	1	26.5	23.0	5
P6KE200A	171.00	190.00	210.00	1	274.0	2.2	5
P6KE200C	162.00	180.00	220.00	1	287.0	2.1	5
P6KE200CA	171.00	190.00	210.00	1	274.0	2.2	5
P6KE20A	17.10	19.00	21.00	1	27.7	22.0	5
P6KE20C	16.20	18.00	22.00	1	29.1	21.0	5
P6KE22A	18.80	20.90	23.10	1	30.6	20.0	5
P6KE22C	17.80	19.80	24.20	1	31.9	19.0	5
P6KE24A	20.50	22.80	25.20	1	33.2	18.0	5
P6KE24C	19.40	21.60	26.40	1	34.7	17.0	5
P6KE24CA	20.50	22.80	25.20	1	33.2	18.0	5
P6KE250A	214.00	237.00	263.00	1	344.0	2.0	5
P6KE250C	202.00	225.00	275.00	1	360.0	2.0	5
P6KE250CA	214.00	237.00	263.00	1	344.0	2.0	5
P6KE27A	23.10	25.70	28.40	1	37.5	16.0	5
P6KE27C	21.80	24.30	29.70	1	39.1	15.0	5
P6KE51A	43.60	48.50	53.60	1	70.1	8.6	5
P6KE51C	41.30	45.90	56.10	1	73.5	8.2	5

C or CA suffix denotes Bi-Directional - Electrical Characteristics apply in both directions.

SPC-F004.DWG

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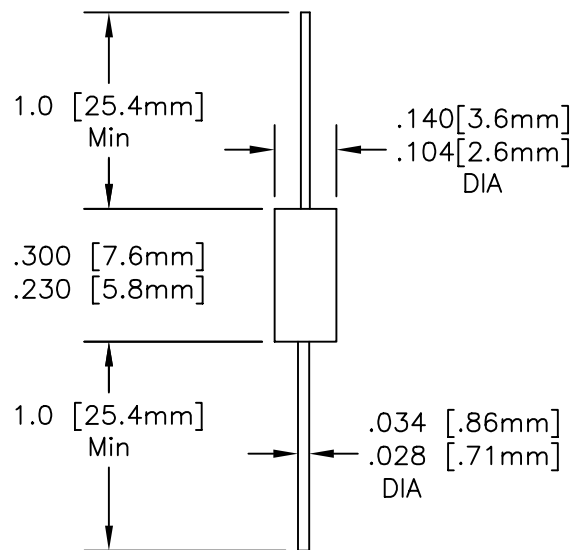
UNLESS OTHERWISE STATED, DIMENSIONS ARE FOR REFERENCE PURPOSES ONLY.	DRAWN BY:	DATE:	DRAWING TITLE:			
	JEFF MCVICKER	7/23/97	JUNCTION TRANSIENT VOLTAGE SUPPRESSOR			
	CHECKED BY:	DATE:	SIZE	DWG. NO.	ELECTRONIC FILE	REV
	JOHN COLE	7/23/97	A	TA-103	TA-103.DWG	B
APPROVED BY:	DATE:	SCALE: NTS		U.O.M.: INCHES [mm]		SHEET: 1 OF 3
BRETT BRAATZ	8/1/97					

### FEATURES

- \*Plastic package has Underwriters Laboratory Flammability Classification UL 94V-0
- \*Glass passivated chip junction in DO-15 package
- \*600W surge capability at 1 ms
- \*Excellent clamping capability
- \*Low zener impedance
- \*Fast response time: typically less than 1.0 ps from 0 volts to BV min.
- \*Typical I less than 1 uA above 10V
- High temperature soldering guaranteed: 260°C/10 seconds/.375" [9.5mm] lead length/5lbs [2.3kg] tension

### MECHANICAL DATA

Case: JEDEC DO-15 Molded Plastic  
 Terminals: Axial leads, solderable per MIL-STD-202, Method 208.  
 Polarity: Color band denoted cathode except Bipolar  
 Mounting Position: Any  
 Weight: 0.015 ounce, 0.4 gram.



**DO-15**

### MAXIMUM RATINGS AND CHARACTERISTICS

Rating (At 2°C ambient temperature unless otherwise specified)	Symbol	Value	Units
Peak Power Dissipation at $T_A=25^\circ\text{C}$ , $T_P=1\text{ms}$ (NOTE 1)	$P_{PK}$	Minimum 600	Watts
Steady State Power Dissipation at $T_L=75^\circ\text{C}$ Lead Lengths .375", (9.5mm) (NOTE 2)	PD	5	Watts
Peak Forward Surge Current, 8.3ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) (NOTE 3)	$I_{FSM}$	100	Amps
Operating and Storage Temperature Range	$T_J$ , $T_{STG}$	-65 to +175	°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 1.57 inches squared (40mm squared)
3. 8.3ms single half sine-wave, duty cycle 4 pulses per minutes maximum
4. Ratings at single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

SIZE <b>A</b>	DWG. NO. <b>TA-103</b>	ELECTRONIC FILE <b>TA-103.DWG</b>	REV <b>B</b>
SCALE: NTS		U.O.M.: INCHES [mm]	SHEET: 2 OF 3

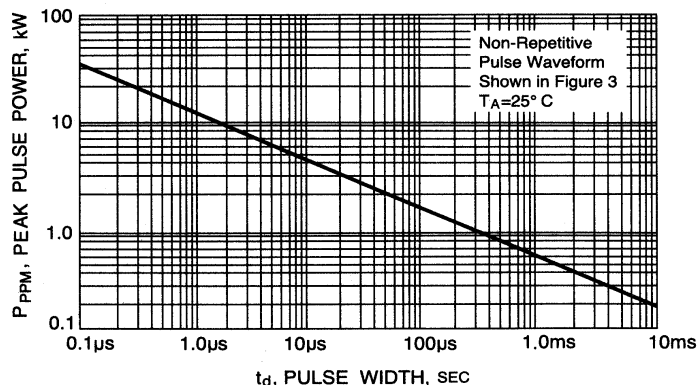


FIG.1-PEAK PULSE POWER RATING CURVE

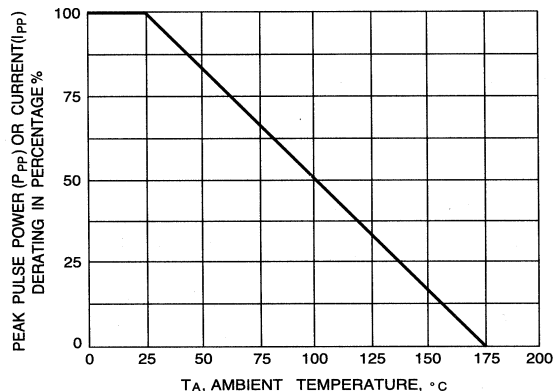


FIGURE 2-PULSE DERATING CURVE

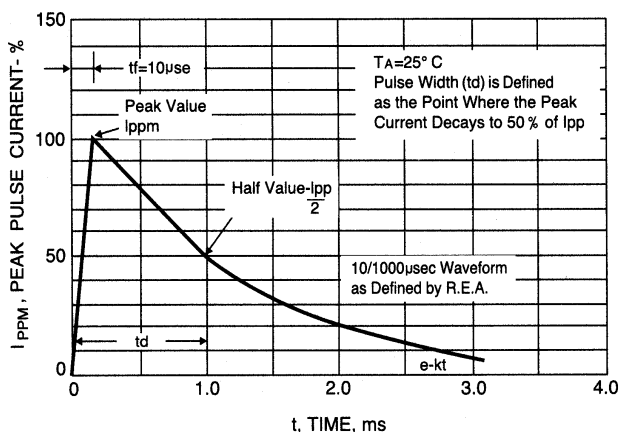


FIGURE 3-PULSE WAVEFORM

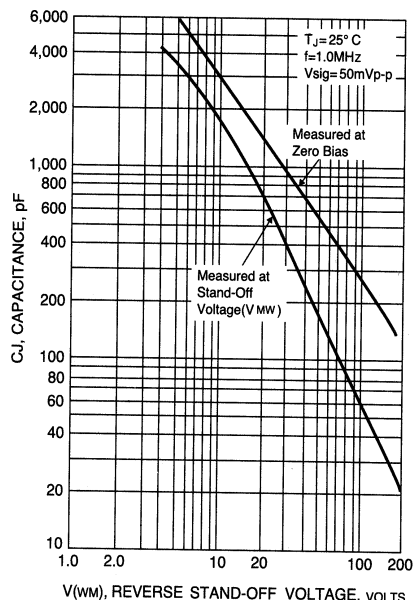


FIG.4-TYPICAL JUNCTION CAPACITANCE UNIDIRECTIONAL

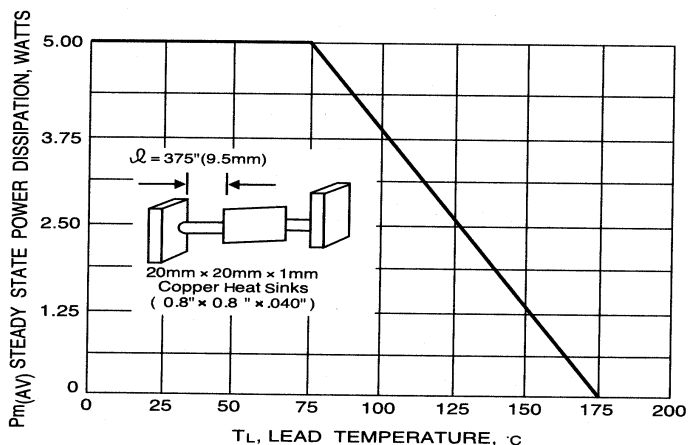


FIG. 5-STEADY STATE POWER DERATING CURVE

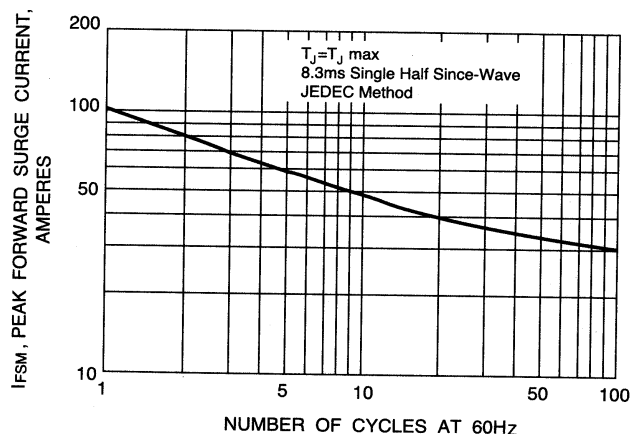


FIG.6-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT UNIDIRECTIONAL

SIZE	DWG. NO.	ELECTRONIC FILE	REV
A	TA-103	TA-103.dwg	B
SCALE: NTS		U.O.M.: INCHES [mm]	SHEET: 3 OF 3