

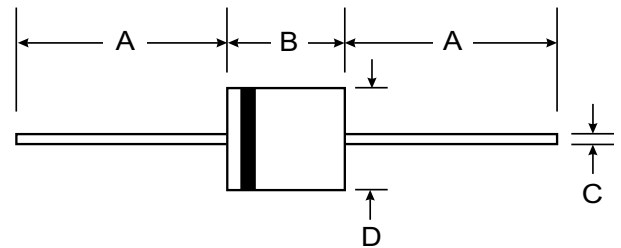
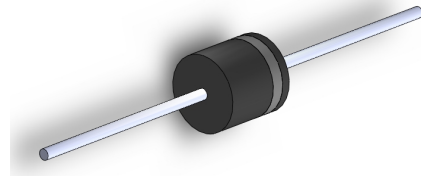
VOLTAGE RANGE: 5.0 - 180 V
POWER: 3000Watts

Features

- Uni- and Bi-Directional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- Plastic Case Material has UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: R-6 Molded Plastic
- Terminals: Axial Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Color Band Indicates Cathode
- Approx. Weight: 1.7 grams
- Mounting Position: Any



R-6		
Dim	Min	Max
A	25.4	—
B	8.6	9.1
C	1.2	1.3
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation at $T_A = 25^{\circ}\text{C}$ (Note 1, 2, 5) Figure 3	PPPM	3000 Minimum	W
Peak Forward Surge Current (Note 3)	IFSM	250	A
Peak Pulse Current on 10/1000 μS Waveform (Note 1) Figure 1	I _{PPM}	See Table 1	A
Steady State Power Dissipation (Note 2, 4)	P _{M(AV)}	8.0	W
Operating and Storage Temperature Range	T _i , T _{STG}	-55 to +175	$^{\circ}\text{C}$

- Note: 1. Non-repetitive current pulse, per Figure 1 and derated above $T_A = 25^{\circ}\text{C}$ per Figure 4.
 2. Mounted on 20mm² copper pad.
 3. 8.3ms single half sine-wave duty cycle = 4 pulses per minutes maximum.
 4. Lead temperature at $75^{\circ}\text{C} = T_L$.
 5. Peak pulse power waveform is 10/1000 μS .

TYPE		Reverse Stand-Off Voltage	Breakdown Voltage Min. @I _T	Breakdown Voltage Max. @ I _T	Test Current	Maximum Clamping Voltage @I _{PP}	Peak Pulse Current	Reverse Leakage @V _{RWM}
(UNI)	(BI)	V _{RWM} (V)	V _{BR} MIN(V)	V _{BR} MAX(V)	I _T (mA)	V _C (V)	I _{PP} (A)	I _R (uA)
3KE5.0A	3KE5.0CA	5.00	6.40	7.00	50	9.2	326.1	2000
3KE6.0A	3KE6.0CA	6.00	6.67	7.37	50	10.3	291.3	2000
3KE6.5A	3KE6.5CA	6.50	7.22	7.98	50	11.2	267.9	1000
3KE7.0A	3KE7.0CA	7.00	7.78	8.60	50	12.0	250.0	400
3KE7.5A	3KE7.5CA	7.50	8.33	9.21	5	12.9	232.6	200
3KE8.0A	3KE8.0CA	8.00	8.89	9.83	5	13.6	220.6	100
3KE8.5A	3KE8.5CA	8.50	9.44	10.40	5	14.4	208.3	50
3KE9.0A	3KE9.0CA	9.00	10.00	11.10	5	15.4	194.8	20
3KE10A	3KE10CA	10.00	11.10	12.30	5	17.0	176.5	15
3KE11A	3KE11CA	11.00	12.20	13.50	5	18.2	168.8	10
3KE12A	3KE12CA	12.00	13.30	14.70	5	19.9	150.8	10
3KE13A	3KE13CA	13.00	14.40	15.90	5	21.5	139.5	10
3KE14A	3KE14CA	14.00	15.60	17.20	5	23.2	129.3	10
3KE15A	3KE15CA	15.00	16.70	18.50	5	24.4	123.0	10
3KE16A	3KE16CA	16.00	17.80	19.70	5	26.0	115.4	10
3KE17A	3KE17CA	17.00	18.90	20.90	5	27.6	108.7	10
3KE18A	3KE18CA	18.00	20.00	22.10	5	29.2	102.7	10
3KE20A	3KE20CA	20.00	22.20	24.50	5	32.4	92.6	10
3KE22A	3KE22CA	22.00	24.40	26.90	5	35.5	84.5	10
3KE24A	3KE24CA	24.00	26.70	29.50	5	38.9	77.1	10
3KE26A	3KE26CA	26.00	28.90	31.90	5	42.1	71.3	10
3KE28A	3KE28CA	28.00	31.10	34.40	5	45.4	66.1	10
3KE30A	3KE30CA	30.00	33.30	36.80	5	48.4	62.0	10
3KE33A	3KE33CA	33.00	36.70	40.60	5	53.3	56.3	10
3KE36A	3KE36CA	36.00	40.00	44.20	5	58.1	51.6	10
3KE40A	3KE40CA	40.00	44.40	49.10	5	64.5	46.5	10
3KE43A	3KE43CA	43.00	47.80	52.80	5	69.4	43.2	10
3KE45A	3KE45CA	45.00	50.00	55.30	5	72.7	41.3	10
3KE48A	3KE48CA	48.00	53.30	58.90	5	77.4	38.8	10
3KE51A	3KE51CA	51.00	56.70	62.70	5	82.4	36.4	10
3KE54A	3KE54CA	54.00	60.00	66.30	5	87.1	34.4	10
3KE58A	3KE58CA	58.00	64.40	71.20	5	93.6	32.1	10
3KE60A	3KE60CA	60.00	66.70	73.70	5	96.8	31.0	10
3KE64A	3KE64CA	64.00	71.10	78.60	5	103.0	29.1	10
3KE70A	3KE70CA	70.00	77.80	86.00	5	113.0	26.5	10
3KE75A	3KE75CA	75.00	83.30	92.10	5	121.0	24.8	10
3KE78A	3KE78CA	78.00	86.70	95.80	5	126.0	23.8	10
3KE85A	3KE85CA	85.00	94.40	104.00	5	137.0	21.9	10
3KE90A	3KE90CA	90.00	100.00	111.00	5	146.0	20.5	10
3KE100A	3KE100CA	100.00	111.00	123.00	5	162.0	18.5	10
3KE110A	3KE110CA	110.00	122.00	135.00	5	177.0	16.9	10
3KE120A	3KE120CA	120.00	133.00	147.00	5	193.0	15.5	10
3KE130A	3KE130CA	130.00	144.00	159.00	5	209.0	14.4	10
3KE150A	3KE150CA	150.00	167.00	185.00	5	243.0	12.3	10
3KE160A	3KE160CA	160.00	178.00	197.00	5	259.0	11.6	10
3KE170A	3KE170CA	170.00	189.00	209.00	5	275.0	10.9	10
3KE180A	3KE180CA	180.00	200.00	233.00	5	289.0	10.4	10

For bidirectional type having V_{rwm} of 10 volts and less, the IR limit is double. For parts without A, the V_{BR} is ± 10%

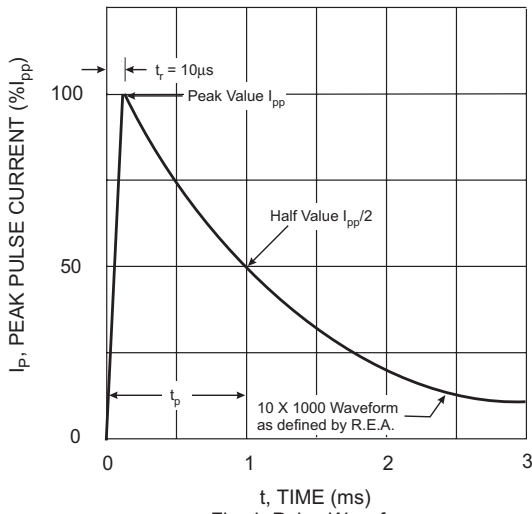


Fig. 1 Pulse Waveform

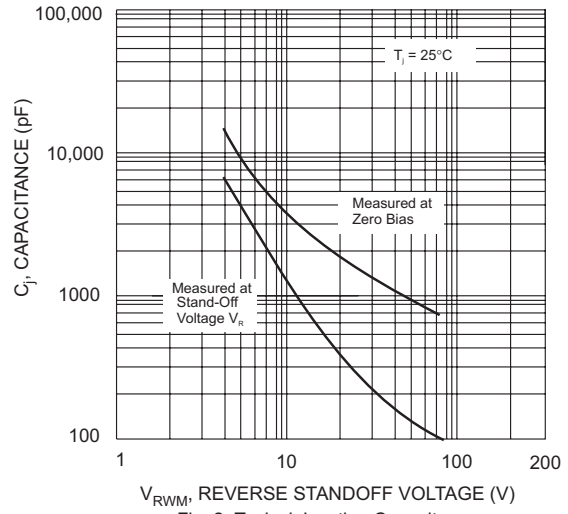


Fig. 2 Typical Junction Capacitance

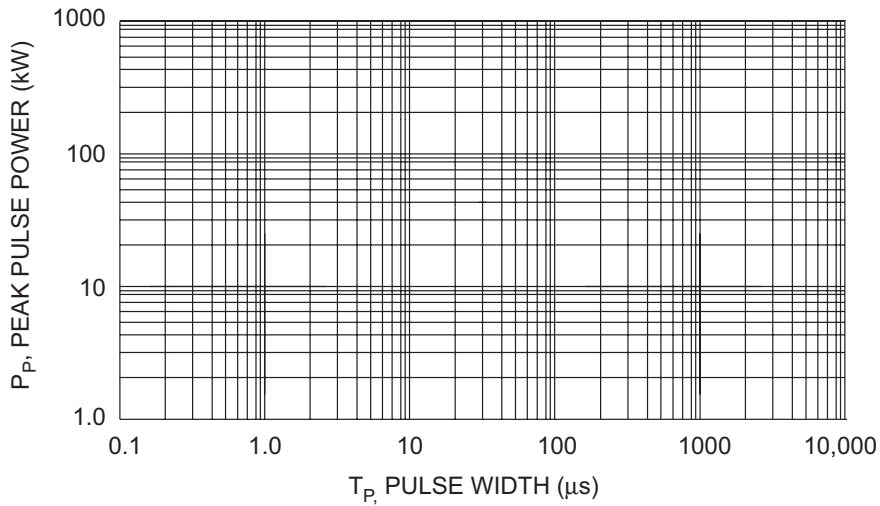


Fig. 3 Pulse Derating Curve

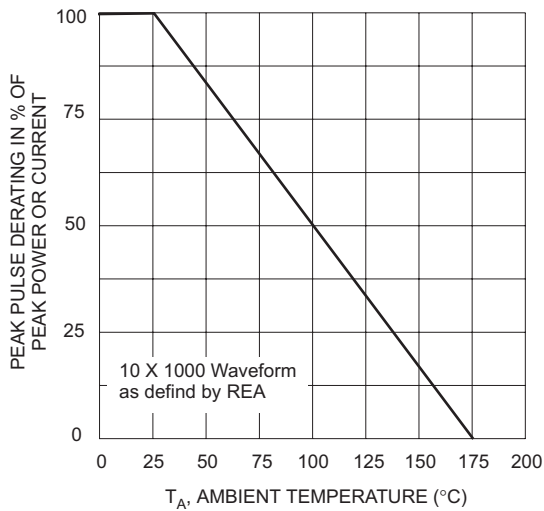


Fig. 4 Pulse Derating Curve

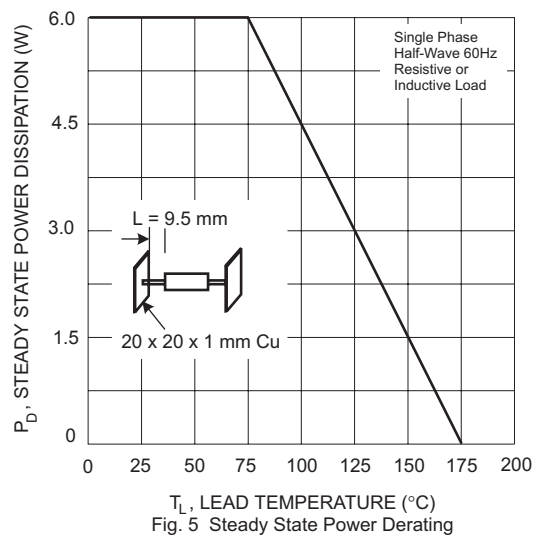


Fig. 5 Steady State Power Derating