Reverse Voltage: 28 to 320 V

Peak Pulse Power: 30000 W

Features

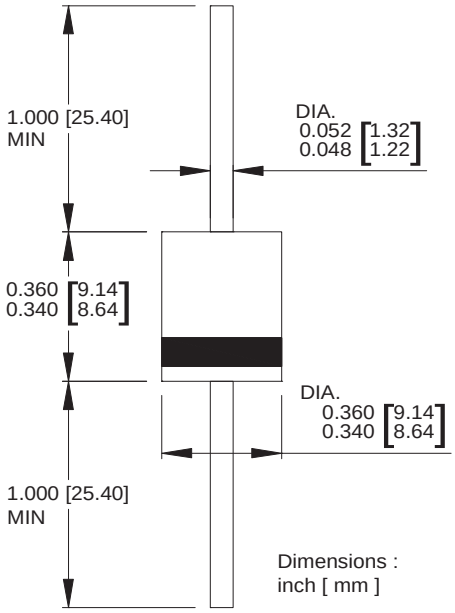
- Glass passivated chip
- 30000 W peak pulse power capability with a 10/1000 μs waveform, repetitive rate (duty cycle):0.01 %
- Low leakage
- Uni and Bidirectional unit
- Excellent clamping capability
- Very fast response time
- RoHS compliant

Mechanical Data

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Solderable per MIL-STD-202, method 208 guranteed
- Polarity: Color band denotes cathode end except Bipolar
- Mounting position: Any

Axial Lead

R-6/P600



Maximum Ratings(T_A=25℃ unless otherwise noted)

Parameter	Symbol	Value	UNIT
Peak power dissipation with a 10/1000μs waveform(1)	P_{PP}	30000	W
Peak pulse current wih a 10/1000μs waveform(1)	I_{PP}	See Next Table	A
Power dissipation on infinite heatsink at T_L = 75 °C	P_D	8.0	W
Peak forward surge current, 8.3 ms single half sine-wave unidirectional only(2)	I_{FSM}	500	A
Operating junction and storage temperature range	T_J, T_{STG}	–55 to +150	°C

Note:

(1)Non-repetitive current pulse per Fig.5 and derated above T_A= 25 °C per Fig.1

(2)Measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum

Ratings and Characteristics Curves (T_A=25℃ unless otherwise noted)

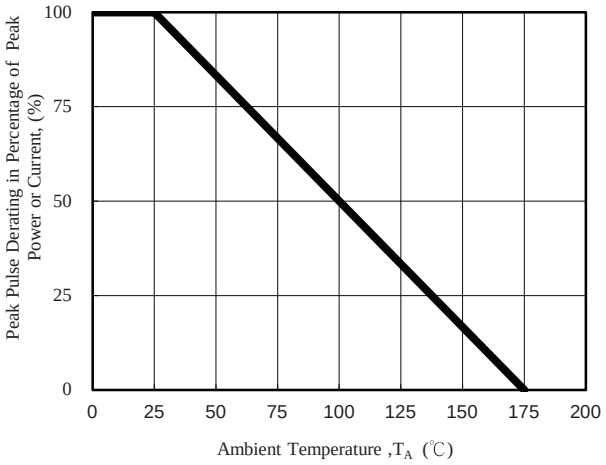


Fig. 1 - Pulse Derating Curve

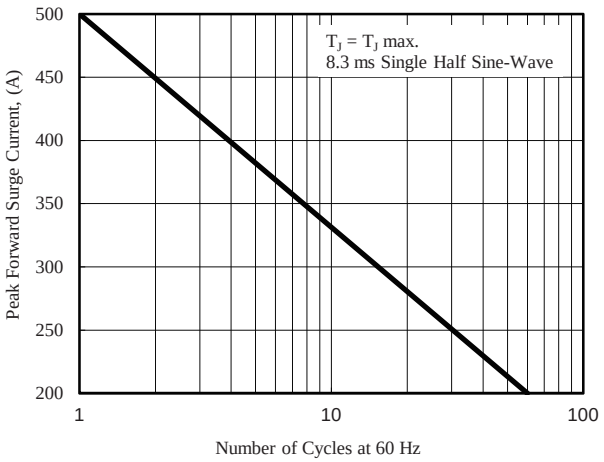


Fig. 2 - Maximum Non-Repetitive Surge Current

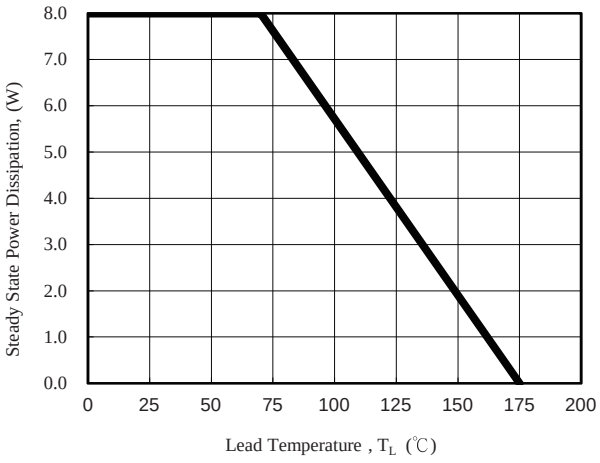


Fig. 3 - Steady State Power Derating Curve

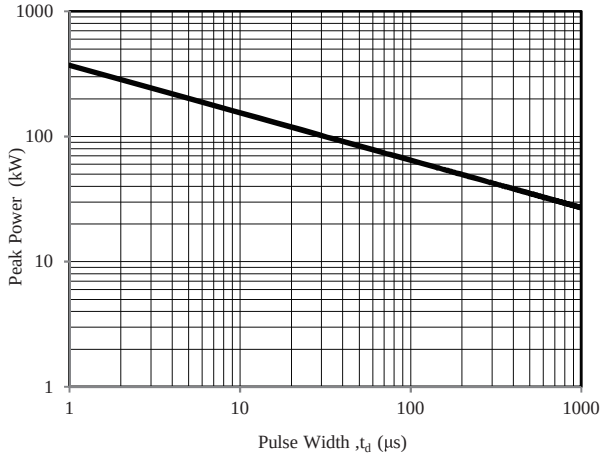


Fig. 4 - Peak Pulse Power Rating Curve

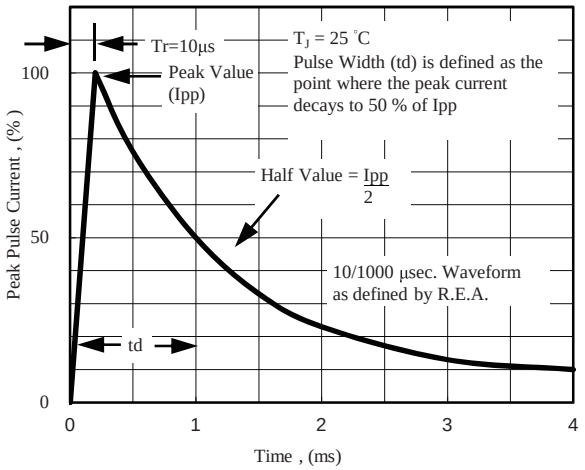


Fig. 5 - Pulse Waveform

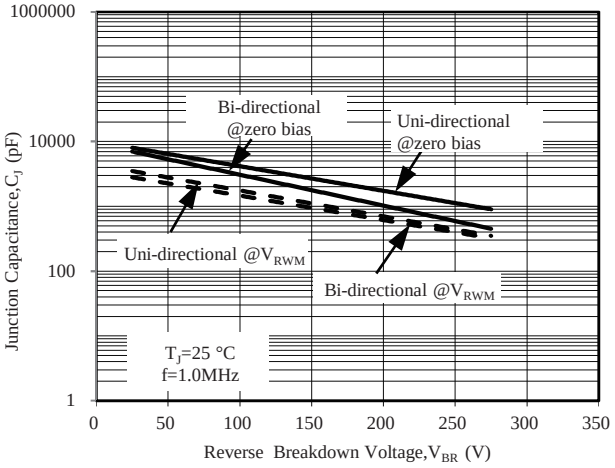


Fig. 6 - Typical Junction Capacitance

Electrical Characteristics(T_A=25℃ unless otherwise noted)

Part Number (Uni)	Part Number (Bi)	Breakdown Voltage V_{BR} @ I_T		Maximum Reverse Leakage I_R @V_{RWM} (uA)	Working Peak Reverse Voltage V_{RWM} (V)	Maximum Reverse Surge Current I_{PP} (A)	Maximum Clamping Voltage V_C @I_{PP} (V)
		Min (V)	I_T (mA)				
T30KPA28A	T30KPA28CA	31.28	50	5000	28	606.0	50.0
T30KPA30A	T30KPA30CA	33.51	50	5000	30	548.9	55.2
T30KPA33A	T30KPA33CA	36.90	50	5000	33	517.9	58.5
T30KPA36A	T30KPA36CA	40.20	50	5000	36	490.3	61.8
T30KPA39A	T30KPA39CA	43.60	20	2000	39	450.9	67.2
T30KPA42A	T30KPA42CA	46.90	10	1000	42	420.8	72.0
T30KPA43A	T30KPA43CA	48.00	10	1000	43	415.1	73.0
T30KPA45A	T30KPA45CA	50.30	5	250	45	391.5	77.4
T30KPA48A	T30KPA48CA	53.60	5	150	48	371.3	81.6
T30KPA51A	T30KPA51CA	57.00	5	50	51	350.7	86.4
T30KPA54A	T30KPA54CA	60.30	5	20	54	331.5	91.4
T30KPA58A	T30KPA58CA	64.80	5	20	58	327.9	92.4
T30KPA60A	T30KPA60CA	67.00	5	15	60	297.1	102.0
T30KPA64A	T30KPA64CA	71.50	5	10	64	291.3	104.0
T30KPA66A	T30KPA66CA	73.70	5	2	66	283.2	107.0
T30KPA70A	T30KPA70CA	78.20	5	2	70	278.0	109.0
T30KPA71A	T30KPA71CA	79.30	5	2	71	271.7	111.5
T30KPA72A	T30KPA72CA	80.40	5	2	72	265.8	114.0
T30KPA75A	T30KPA75CA	83.80	5	2	75	253.8	119.4
T30KPA78A	T30KPA78CA	87.10	5	2	78	234.9	129.0
T30KPA84A	T30KPA84CA	93.80	5	2	84	217.7	139.2
T30KPA90A	T30KPA90CA	100.50	5	2	90	207.0	146.4
T30KPA96A	T30KPA96CA	107.20	5	2	96	194.2	156.0
T30KPA102A	T30KPA102CA	113.90	5	2	102	183.0	165.6
T30KPA108A	T30KPA108CA	120.60	5	2	108	172.9	175.2
T30KPA120A	T30KPA120CA	134.00	5	2	120	155.9	194.4
T30KPA132A	T30KPA132CA	147.40	5	2	132	142.3	213.0
T30KPA144A	T30KPA144CA	160.80	5	2	144	135.8	223.2
T30KPA150A	T30KPA150CA	167.60	5	2	150	129.8	233.4
T30KPA156A	T30KPA156CA	174.30	5	2	156	123.7	245.0
T30KPA160A	T30KPA160CA	178.70	5	2	160	120.0	252.6
T30KPA168A	T30KPA168CA	187.70	5	2	168	111.2	272.4
T30KPA170A	T30KPA170CA	189.90	5	2	170	110.2	275.0
T30KPA180A	T30KPA180CA	201.10	5	2	180	104.3	290.4
T30KPA198A	T30KPA198CA	221.20	5	2	198	94.7	319.8
T30KPA216A	T30KPA216CA	241.30	5	2	216	86.9	348.6
T30KPA240A	T30KPA240CA	268.10	5	2	240	78.3	387.0
T30KPA258A	T30KPA258CA	288.20	5	2	258	72.8	416.4
T30KPA260A	T30KPA260CA	290.40	5	2	260	72.8	416.0
T30KPA270A	T30KPA270CA	301.60	5	2	270	69.5	436.2
T30KPA280A	T30KPA280CA	312.80	5	2	280	65.3	464.0
T30KPA288A	T30KPA288CA	321.70	5	2	288	64.5	469.9
T30KPA300A	T30KPA300CA	334.00	5	2	300	62.0	484.0
T30KPA320A	T30KPA320CA	356.00	5	2	320	57.0	530.0

Note:

1. For Bi-Directional devices having V_R of 60 volts and under, the I_R limit is double