Glass Passivated Junction Transient Voltage Suppressor Rectifiers

Reverse Voltage 28 ~ 400 V
15000 Watt Peak Pulse Power

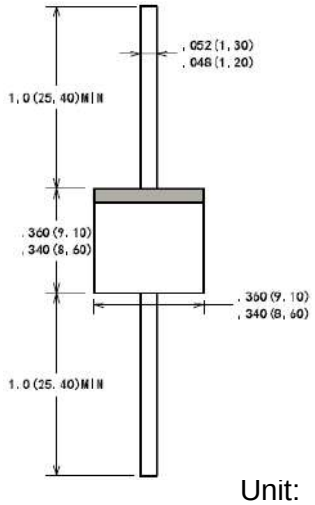
Features

- Glass passivated chip
- 15000 W peak pulse power capability with a 10/1000 us waveform, repetitive rate (duty cycle):0.01 %
- Excellent clamping capability
- Low reverse leakage
- Very fast response time
- Lead and body according with RoHS standard

Mechanical Data

- Case:R-6 Molded plastic
- Lead: Solderable per MIL-STD-750, method 2026
- Epoxy: UL 94V-0 rate flame retardant
- Polarity: Color band denotes cathode end except Bipolar
- Mounting position: Any

R-6



Unit: inch (mm)

Maximum Ratings & Characteristics Ratings at 25℃ ambient temperature unless otherwise specified.

Parameter	Symbols	Value	Unit
Peak power dissipation with a 10/1000 us waveform(1)	P_{PP}	15000	W
Peak pulse current wih a 10/1000 us waveform(1)	I_{PP}	See Next Table	A
Power dissipation on infinite heatsink at TL = 75 °C	P_D	8.0	W
Peak forward surge current, 8.3 ms single half sinewave	I_{FSM}	400	A
Operating junction and storage temperature range	T_J , T_{STG}	-55 to +150	℃

Note:

1)Non-repetitive current pulse per Fig.5 and derated above TA= 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 ;

Part Number		Reverse Stand-off Voltage	Breakdown Voltage V_{BR} @ I_T		Test Current	Max. Clamping Voltage @ I_{PP}	Max. Peak Pulse Current	Max. Reverse Leakage @ V_{RWM}
UNI-POLAR	BI-POLAR	V_{RWM}(V)	Min.(V)	Max.(V)	I_T(mA)	$V_{C\ MAX.}$(V)	I_{PP}(A)	I_R(uA)
15KP28A	15KP28CA	28.0	31.10	34.40	50	50.0	303.0	5000
15KP30A	15KP30CA	30.0	33.30	36.80	50	55.2	274.0	5000
15KP33A	15KP33CA	33.0	36.70	40.60	50	58.5	259.0	5000
15KP36A	15KP36CA	36.0	40.00	44.40	50	61.8	245.2	5000
15KP39A	15KP39CA	39.0	43.50	47.70	50	67.2	225.5	5000
15KP42A	15KP42CA	42.0	46.80	51.40	10	72.0	210.4	1000
15KP43A	15KP43CA	43.0	47.80	52.80	10	73.0	207.6	1000
15KP45A	15KP45CA	45.0	50.00	55.30	5	77.4	195.8	250
15KP48A	15KP48CA	48.0	53.20	58.80	5	81.6	185.7	150
15KP51A	15KP51CA	51.0	56.70	62.70	5	86.4	175.4	50
15KP54A	15KP54CA	54.0	60.00	66.60	5	91.4	165.8	20
15KP58A	15KP58CA	58.0	64.40	71.20	5	92.4	164.0	20
15KP60A	15KP60CA	60.0	66.60	73.80	5	102.0	148.6	15
15KP64A	15KP64CA	64.0	71.10	78.60	5	104.0	145.7	10
15KP66A	15KP66CA	66.0	73.20	81.00	5	107.0	141.6	2
15KP70A	15KP70CA	70.0	77.80	86.00	5	109.0	139.0	2
15KP71A	15KP71CA	71.0	79.20	86.80	5	111.5	135.9	2
15KP72A	15KP72CA	72.0	79.80	88.20	5	114.0	132.9	2
15KP75A	15KP75CA	75.0	83.50	92.20	5	119.4	126.9	2
15KP78A	15KP78CA	78.0	86.40	95.40	5	129.0	117.5	2
15KP84A	15KP84CA	84.0	93.60	103.20	5	139.2	108.9	2
15KP90A	15KP90CA	90.0	100.2	111.0	5	146.4	103.5	2
15KP96A	15KP96CA	96.0	106.8	118.2	5	156.0	97.1	2
15KP102A	15KP102CA	102.0	113.40	125.40	5	165.6	91.5	2
15KP108A	15KP108CA	108.0	120.00	132.60	5	175.2	86.5	2
15KP120A	15KP120CA	120.0	133.2	147.0	5	194.4	78.0	2
15KP132A	15KP132CA	132.0	146.4	161.4	5	213.0	71.2	2
15KP144A	15KP144CA	144.0	160.2	177.0	5	223.2	67.9	2
15KP150A	15KP150CA	150.0	167.0	185.0	5	233.4	64.9	2
15KP156A	15KP156CA	156.0	173.4	191.4	5	245.0	61.9	2
15KP160A	15KP160CA	160.0	178.0	197.0	5	252.6	60.0	2
15KP168A	15KP168CA	168.0	186.6	206.4	5	272.4	55.6	2
15KP170A	15KP170CA	170.0	189.0	209.0	5	275.0	55.1	2
15KP180A	15KP180CA	180.0	199.8	220.8	5	290.4	52.2	2
15KP198A	15KP198CA	198.0	220.2	243.6	5	319.8	47.4	2
15KP216A	15KP216CA	216.0	240.0	265.2	5	348.6	43.5	2
15KP240A	15KP240CA	240.0	266.4	294.6	5	387.0	39.2	2
15KP250A	15KP250CA	250.0	278.6	311.2	5	402.8	37.2	2
15KP258A	15KP258CA	258.0	286.8	316.8	5	416.4	36.4	2
15KP260A	15KP260CA	260.0	290.2	317.8	5	416.4	36.4	2
15KP270A	15KP270CA	270.0	300.0	331.8	5	436.2	34.8	2
15KP280A	15KP280CA	280.0	312.6	342.2	5	464.0	32.7	2
15KP288A	15KP288CA	288.0	319.8	353.4	5	469.9	32.3	2
15KP300A	15KP300CA	300.0	333.0	368.5	5	483.0	31.3	2
15KP350A	15KP350CA	350.0	389.0	429.8	5	564.0	26.8	2
15KP400A	15KP400CA	400.0	444.0	491.2	5	644.0	23.5	2

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

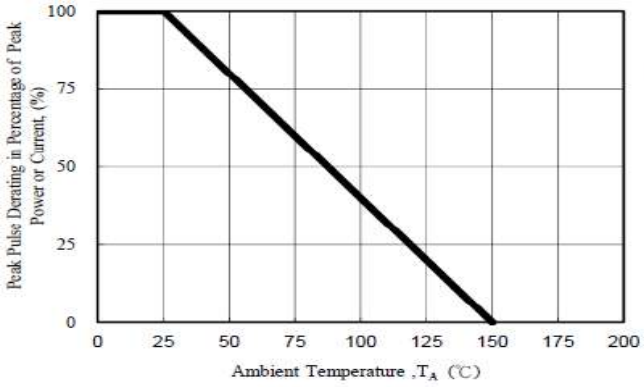


Fig. 1 - Pulse Derating Curve

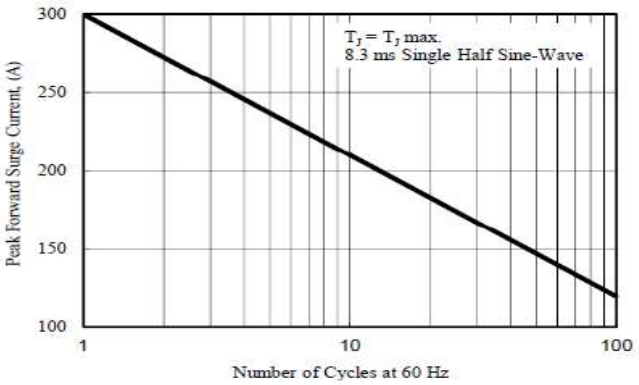


Fig. 2 - Maximum Non-Repetitive Surge Current

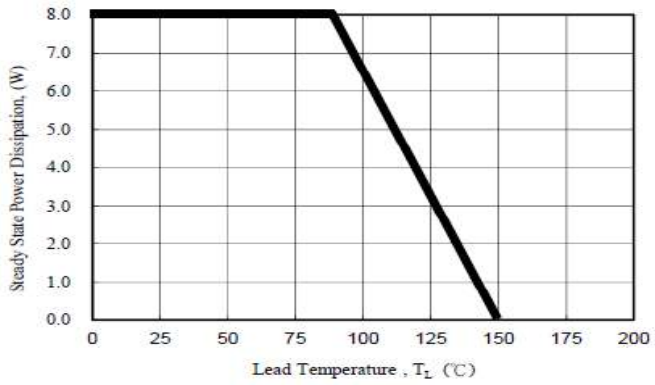


Fig. 3 - Steady State Power Derating Curve

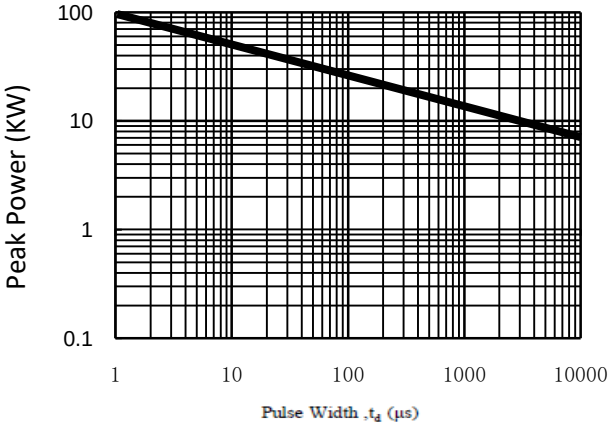


Fig. 4 - Peak Pulse Power Rating Curve

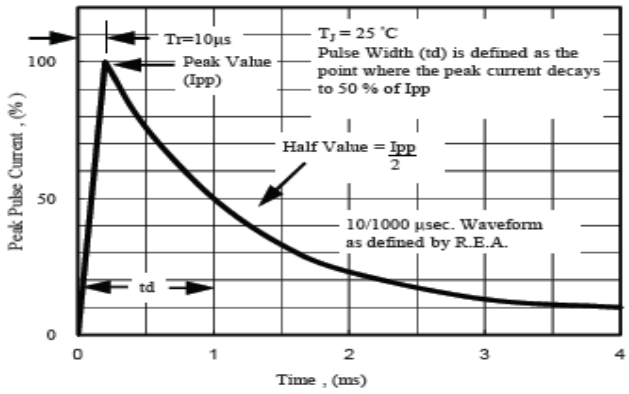


Fig. 5 - Pulse Waveform

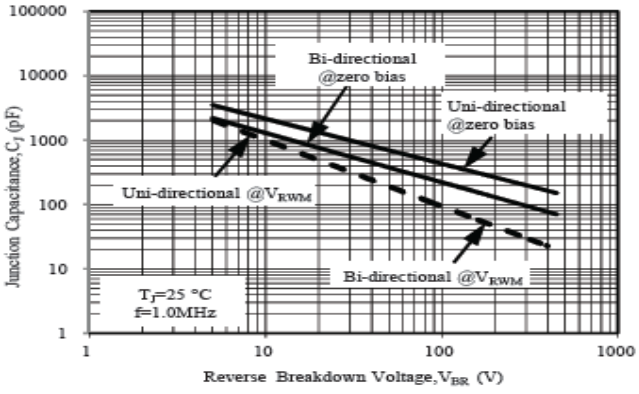


Fig. 6 - Typical Junction Capacitance