15KPA ***Series

GLASS PASSIVATED JUNCTION TRANSIENT VOLTAGE SUPPRESSOR

VOLTAGE - 17 TO 280 Volts

15000Watt Peak Power 8 Watt Steady State

Feature

* Plastic package has Underwriters Laboratory Flammability Classification 94V-O
* Glass passivated chip junction in R-6 package
* 15000W surge capability at 1ms
* Excellent clamping capability
* Fast response time: typically less than 1.0 ps from 0 volts to BV min
* Typical IR less than 2μA above 33V
* High temperature soldering guaranteed: 260 /10 seconds/.375",(9.5mm) lead length/5lbs., (2.3kg) tension

Bi-directional

CATHODE ANODE

Uni-directional

2.Mechanical Data

Case: JEDEC R - 6 molded plastic
Terminals: Axial leads, solderable per MIL-STD-202, Method 208
Polarity: Color band denoted cathode except Bipolar
Mounting Position: Any
Weight: 0.042 ounce, 1.19 gram

We declare that the material of product compliance with ROHS requirements

DEVICES FOR BIPOLAR APPLICATIONS

For Bidirectional use CA Suffix for types 15KPA17A thru types 15KPA280A

Electrical characteristics apply in both directions.marking code is all type.

1.Electrical Characteristic

Ratings at 25℃ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	VALUE	UNITS
Peak Power Dissipation at T_A=25°C, T_P=1ms(Note 1)	P_{PPM}	15000	Watts
Steady State Power Dissipation at T_L=75°C Lead Lengths .375",(9.5mm) (Note 2)	$P_{M(AV)}$	8.0	Watts
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load(JECED Method) (Note 3)	I_{FSM}	400	Amps
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +175	°C

NOTES:
1. Non-repetitive current pulse, per Fig. 3 and derated above TA=25°Cper Fig. 2.
2. Mounted on Copper Leaf area of 1.57in2(40mm2).
3. 8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.

15KPA*** Series

UNI-DIRECTIONAL PART NUMBER	BII-DIRECTIONAL PART NUMBER	REVERSE STAND-OFF VOLTAGE VRWM (V)	BREAKDOWN VOLTAGE VBR (V) MIN. @IT	BREAKDOWN VOLTAGE VBR (V) MAX. @IT	TEST CURRENT IT (mA)	MAXIMUM Peak Pulse Current IPP (A)	REVERSE LEAKAGE @VRWM IR (uA)	MAXIMUM CLAMPING VOLTAGE @IPP VC (V)
15KPA17A	15KPA17CA	17	18.99	20.79	50	515.4	5000	29.3
15KPA18A	15KPA18CA	18	20.11	22.01	50	488.7	5000	30.9
15KPA20A	15KPA20CA	20	22.34	24.46	20	440.2	1500	34.3
15KPA22A	15KPA22CA	22	24.57	26.91	10	407.0	500	37.1
15KPA24A	15KPA24CA	24	26.81	29.35	5	371.0	150	40.7
15KPA26A	15KPA26CA	26	29.04	31.80	5	343.2	50	44.0
15KPA28A	15KPA28CA	28	31.28	34.24	5	317.9	25	47.5
15KPA30A	15KPA30CA	30	33.51	36.70	5	297.8	15	50.7
15KPA33A	15KPA33CA	33	36.9	40.4	5	276.1	2	54.7
15KPA36A	15KPA36CA	36	40.2	44.0	5	252.5	2	59.8
15KPA40A	15KPA40CA	40	44.7	48.9	5	229.5	2	65.8
15KPA43A	15KPA43CA	43	48.0	52.6	5	216.3	2	69.8
15KPA45A	15KPA45CA	45	50.3	55.0	5	207.4	2	72.8
15KPA48A	15KPA48CA	48	53.6	58.7	5	194.3	2	77.7
15KPA51A	15KPA51CA	51	57.0	62.4	5	182.1	2	82.9
15KPA54A	15KPA54CA	54	60.3	66.0	5	172.2	2	87.7
15KPA58A	15KPA58CA	58	64.8	70.9	5	161.0	2	93.8
15KPA60A	15KPA60CA	60	67.0	73.4	5	155.0	2	97.4
15KPA64A	15KPA64CA	64	71.5	78.3	5	144.9	2	104.2
15KPA70A	15KPA70CA	70	78.2	85.6	5	132.9	2	113.6
15KPA75A	15KPA75CA	75	83.8	91.7	5	123.8	2	122.0
15KPA78A	15KPA78CA	78	87.1	95.4	5	119.7	2	126.1
15KPA85A	15KPA85CA	85	94.9	104.0	5	109.7	2	137.6
15KPA90A	15KPA90CA	90	100.5	110.1	5	103.7	2	145.6
15KPA100A	15KPA100CA	100	111.7	122.3	5	93.6	2	161.3
15KPA110A	15KPA110CA	110	122.9	134.5	5	84.5	2	178.6
15KPA120A	15KPA120CA	120	134.0	146.8	5	78.5	2	192.3
15KPA130A	15KPA130CA	130	145.2	159.0	5	72.5	2	208.3
15KPA150A	15KPA150CA	150	167.6	183.5	5	62.4	2	241.9
15KPA160A	15KPA160CA	160	178.7	195.7	5	58.4	2	258.6
15KPA170A	15KPA170CA	170	189.9	207.9	5	55.4	2	272.7
15KPA180A	15KPA180CA	180	201.1	220.1	5	52.3	2	288.5
15KPA200A	15KPA200CA	200	223.4	244.6	5	47.3	2	319.1
15KPA220A	15KPA220CA	220	245.7	269.1	5	42.4	2	356.0
15KPA240A	15KPA240CA	240	268.1	293.5	5	39.3	2	384.6
15KPA260A	15KPA260CA	260	290.4	318.0	5	36.2	2	416.7
15KPA280A	15KPA280CA	280	312.8	342.4	5	33.2	2	454.5

NOTES:

1. Non-repetitive current pulse, per Fig. 3 and derated above TA=25°Cper Fig. 2.
2. Mounted on Copper Leaf area of 1.57in2(40mm2).
3. 8.3ms single half sine-wave, duty cycle= 4 pulses per minutes maximum.

15KPA ***Series

2. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1-Peak Pulse Power Rating Curve

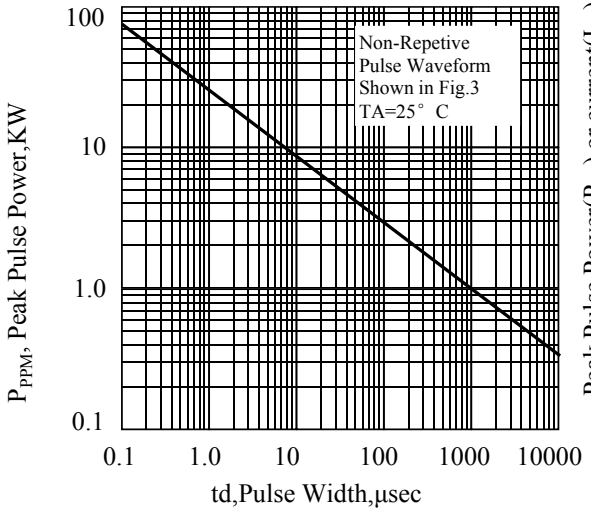


Fig. 2-Pulse Derating Curve

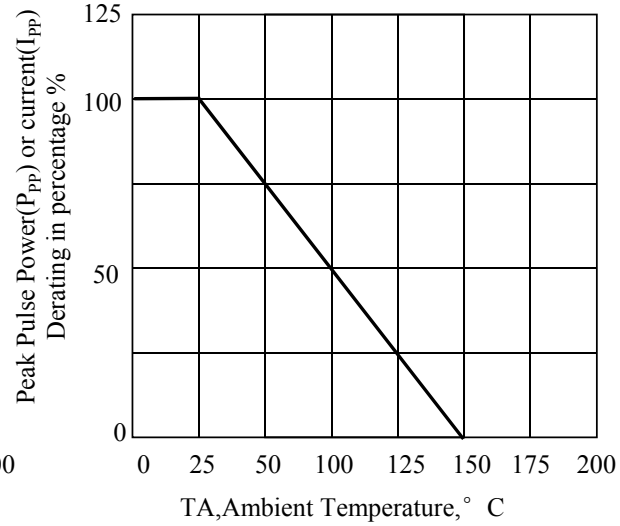


Fig. 3-Pulse Waveform

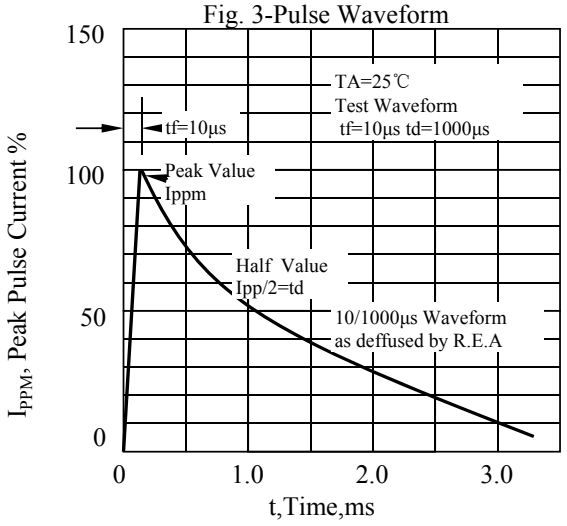


Fig. 4-Typical Junction Capacitance
Unidirectional

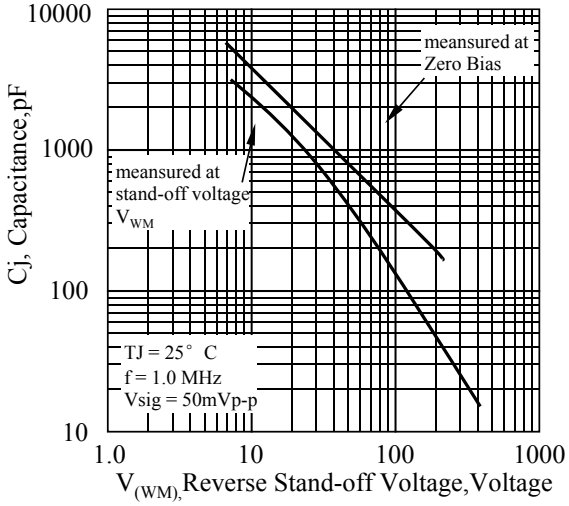


Fig. 5-Steady State Power
Derating Curve

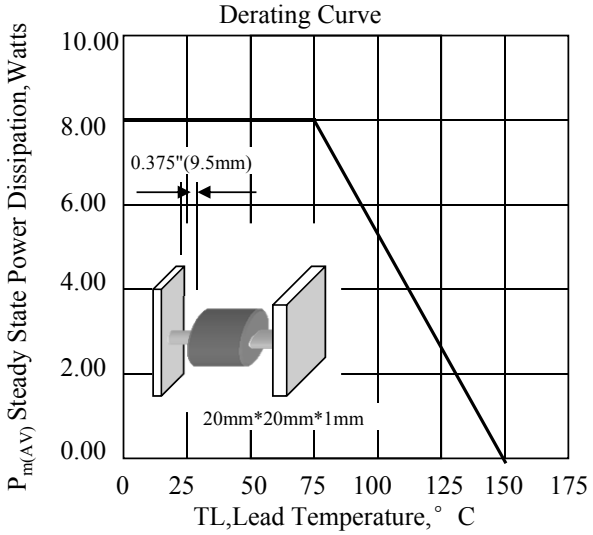
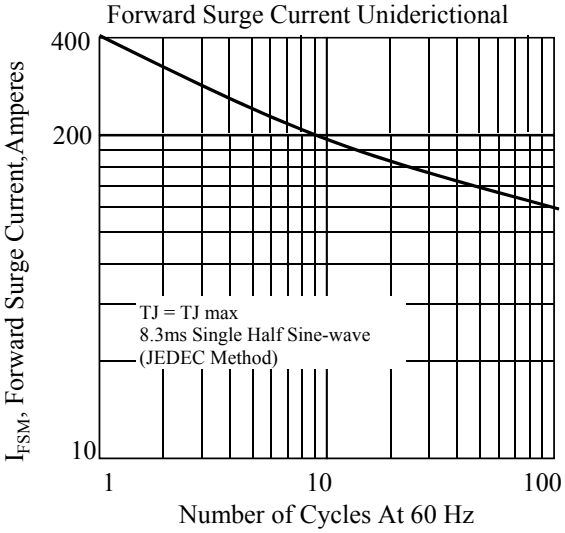
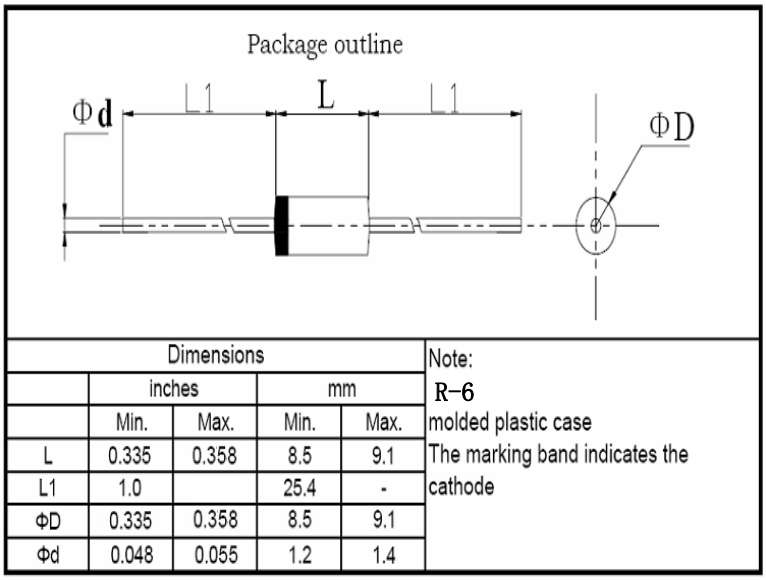


Fig. 6-Maximum Non-Repetitive Peak
Forward Surge Current Unidirectional



15KPA ***Series

3. dimension:



Dimensions				
	inches		mm	
	Min.	Max.	Min.	Max.
L	0.335	0.358	8.5	9.1
L1	1.0		25.4	-
ΦD	0.335	0.358	8.5	9.1
Φd	0.048	0.055	1.2	1.4

Note:
R-6
molded plastic case
The marking band indicates the cathode

15KPA ***Series

4. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	谭志伟	2018-5-16