

15000W AXIAL LEAD TVS**Features**

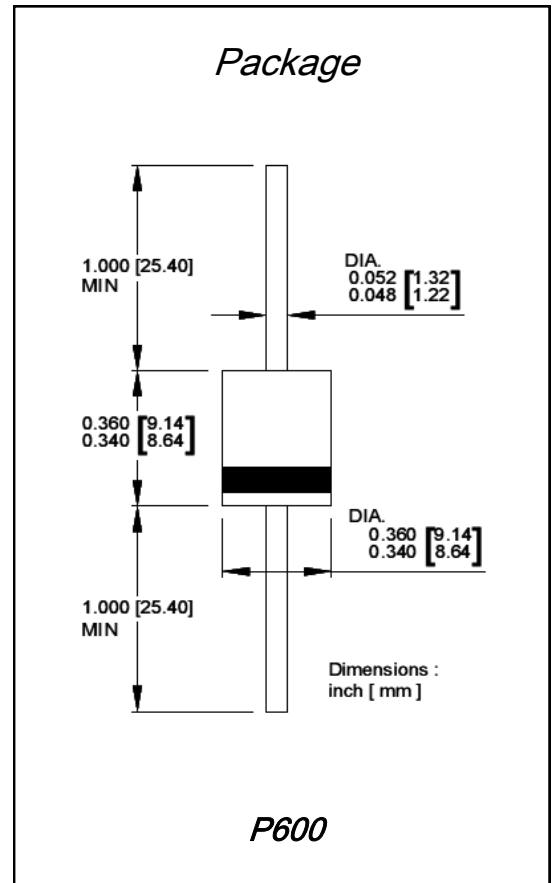
- ◆ Glass Passivated Chip
- ◆ Low Leakage
- ◆ Uni and Bidirectional Unit
- ◆ Excellent Clamping Capability
- ◆ Very Fast Response Time
- ◆ RoHS Compliant
- ◆ 15000 W peak pulse power capability with 10/1000us waveform, repetitive rate (duty cycle): 0.01 %

Application

- ◆ IPC
- ◆ Car Electronics
- ◆ Power Supply
- ◆ Smart Meters

Mechanical Characteristics

- ◆ Case: Molded Plastic
- ◆ Epoxy: UL 94V-0 rate flame retardant
- ◆ Lead: Solderable per MIL-STD-202, method 208 guaranteed
- ◆ Polarity: Color band denotes cathode end except Bi-directional parts
- ◆ Mounting position: Any



DEVICE CHARACTERISTICS

Maximum Rating			
Parameter	Symbol	Value	Units
Peak Power Dissipation With 10/1000us Waveform	P _{PP}	15000	Watt
Peak Pulse Current With 10/1000us Waveform	I _{PP}	-	A
Power Dissipation On Infinite Heatsink @ T _L = 75°C	P _D	8	Watt
Peak Forward Surge Current	I _{FSM}	500	A
Maximum Instantaneous Forward Voltage @ 50 A	V _F	3.5/5	V
Operating Temperature Range	T _J	-55~150	°C
Storage Temperature Range	T _{STG}	-55~150	°C

ELECTRICAL CHARACTERISTICS @ 25°C								
Part Number	Part Number	Breakdown Voltage VBR @IT			IR @	V _{RWM}	I _{PP}	V _C @ I _{PP}
		Min (V)	Max (V)	IT (mA)	V _{RWM}	(V)	(A)	(V)
15KP17A	15KP17CA	18.9	20.8	50	5000	17	515.4	29.3
15KP18A	15KP18CA	20.1	22.0	50	5000	18	488.7	30.9
15KP20A	15KP20CA	22.3	24.5	20	1500	20	440.2	34.3
15KP22A	15KP22CA	24.5	26.9	10	500	22	407.0	37.1
15KP24A	15KP24CA	26.8	29.3	5	150	24	371.0	40.7
15KP26A	15KP26CA	29.0	31.8	5	50	26	343.2	44.0
15KP28A	15KP28CA	31.2	34.2	5	25	28	317.9	47.5
15KP30A	15KP30CA	33.5	36.7	5	15	30	297.8	50.7
15KP33A	15KP33CA	36.9	40.4	5	2	33	276.1	54.7
15KP36A	15KP36CA	40.2	44.0	5	2	36	252.5	59.8
15KP40A	15KP40CA	44.7	48.9	5	2	40	229.5	65.8
15KP43A	15KP43CA	48.0	52.6	5	2	43	216.3	69.8
15KP45A	15KP45CA	50.3	55.0	5	2	45	207.4	72.8
15KP48A	15KP48CA	53.6	58.7	5	2	48	194.3	77.7
15KP51A	15KP51CA	57.0	62.4	5	2	51	182.1	82.9
15KP54A	15KP54CA	60.3	66.0	5	2	54	172.2	87.7
15KP58A	15KP58CA	64.8	70.9	5	2	58	161.0	93.8

DEVICE CHARACTERISTICS

ELECTRICAL CHARACTERISTICS @ 25°C								
Part Number	Part Number	Breakdown Voltage VBR @IT			IR @ V _{RWM}	V _{RWM}	I _{PP}	V _C @ I _{PP}
		Min (V)	Max (V)	IT (mA)	(μ A)	(V)	(A)	(V)
15KP60A	15KP60CA	67.0	73.4	5	2	60	155.0	97.4
15KP64A	15KP64CA	71.5	78.3	5	2	64	144.9	104.2
15KP70A	15KP70CA	78.2	85.6	5	2	70	132.9	113.6
15KP75A	15KP75CA	83.8	91.7	5	2	75	123.8	122.0
15KP78A	15KP78CA	87.1	95.4	5	2	78	119.7	126.1
15KP85A	15KP85CA	94.9	104.0	5	2	85	109.7	137.6
15KP90A	15KP90CA	100.5	110.1	5	2	90	103.7	145.6
15KP100A	15KP100CA	111.7	122.3	5	2	100	93.6	161.3
15KP110A	15KP110CA	122.9	134.5	5	2	110	84.5	178.6
15KP120A	15KP120CA	134	146.8	5	2	120	78.5	192.3
15KP130A	15KP130CA	145.2	159	5	2	130	72.5	208.3
15KP150A	15KP150CA	167.6	183.5	5	2	150	62.4	241.9
15KP160A	15KP160CA	178.7	195.7	5	2	160	58.4	258.6
15KP170A	15KP170CA	189.9	207.9	5	2	170	55.4	272.7
15KP180A	15KP180CA	201.1	220.1	5	2	180	52.3	288.5
15KP200A	15KP200CA	223.4	244.6	5	2	200	47.3	319.1
15KP220A	15KP220CA	245.7	269.1	5	2	220	35.2	428.6
15KP240A	15KP240CA	268.1	293.5	5	2	240	39.3	384.6
15KP260A	15KP260CA	290.4	318.0	5	2	260	36.2	416.7
15KP280A	15KP280CA	312.8	342.4	5	2	280	33.2	454.5

RATING CURVES

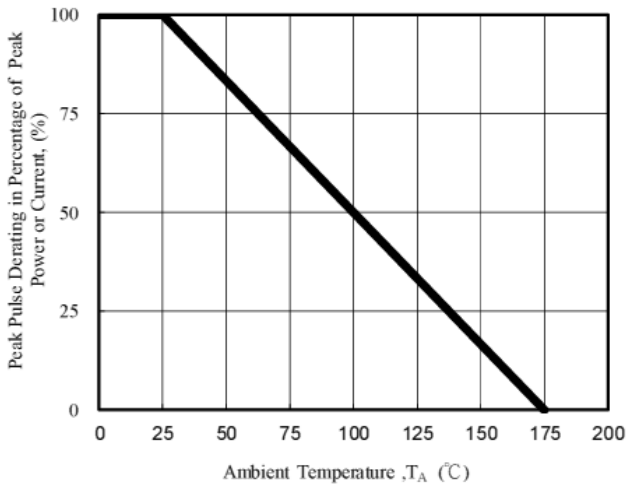


Fig. 1 - Pulse Derating Curve

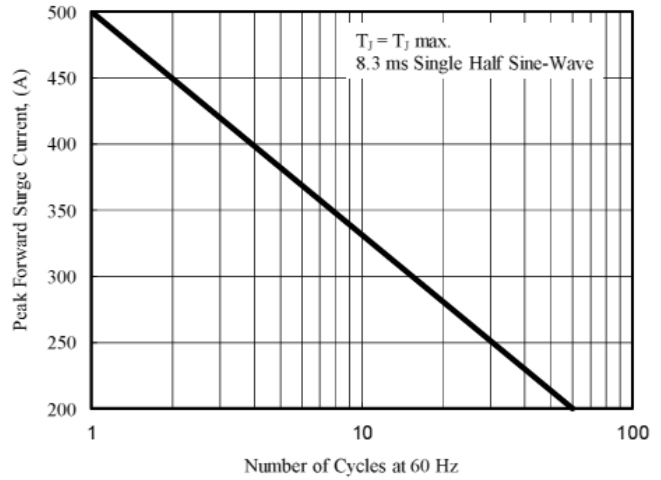


Fig. 2 - Maximum Non-Repetitive Surge Current

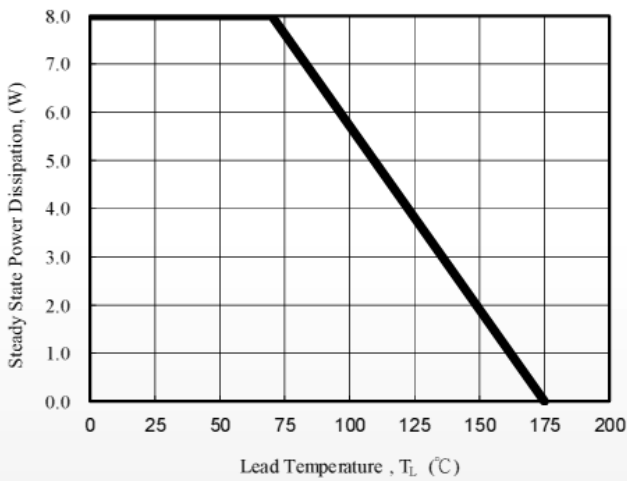


Fig. 3 - Steady State Power Derating Curve

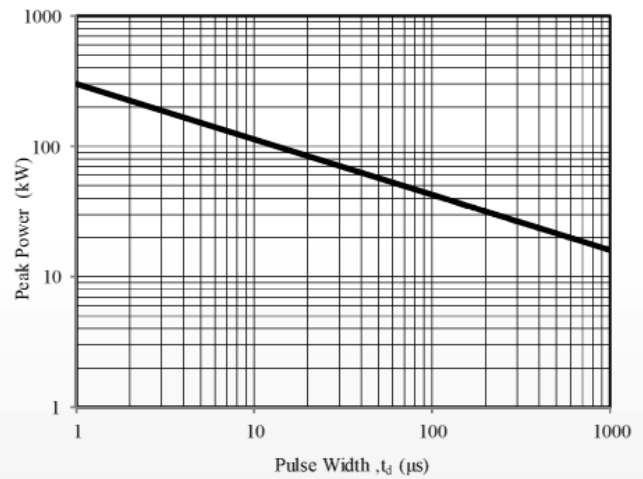


Fig. 4 - Peak Pulse Power Rating Curve

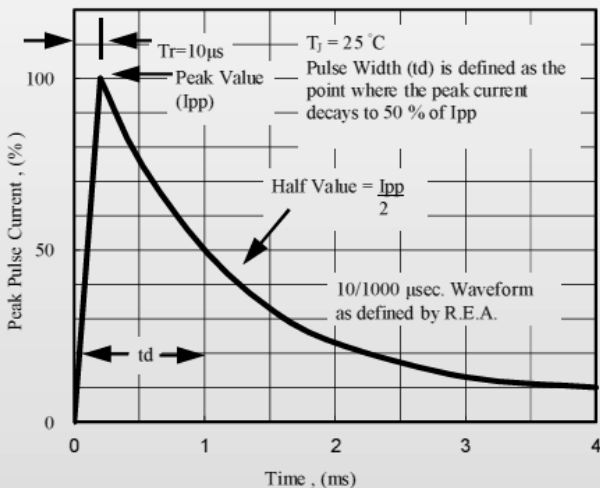


Fig. 5 - Pulse Waveform

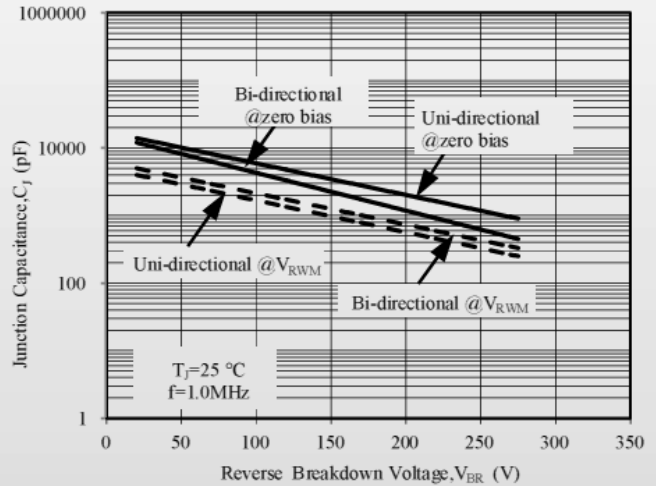


Fig. 6 - Typical Junction Capacitance

REFERENCE

Revision History	Modification Description
Rev.1.0	Initial Release
Rev1.01	Edit Document Layout