

Description

The 8KP series are transient voltage suppressor designed to protect telecommunication equipment against lightning and transients.

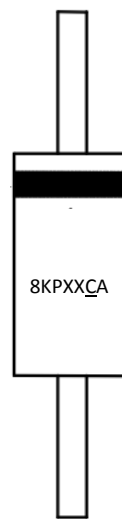
Features

- 8000W Peak Pulse Power (10/1000µs)
- Fast Response Time: <1ns
- Unidirectional or Bidirectional Configuration
- Glass passivated chip junction in P600 Package
- Complies with following standards:
 - IEC 61000-4-2 (ESD) immunity test
 - Air discharge: ±15kV
 - Contact discharge: ±8kV
 - IEC61000-4-4 (EFT)
- RoHS Compliant

Applications

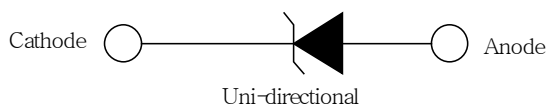
TVS devices are ideal for the protection of I/O interfaces, V_{CC} bus and other vulnerable circuits used in Telecom, Computer, Industrial and Consumer electronic applications

Marking Information



XX = V_R Voltage
 C for bidirectional only

Device Schematic



Device Schematic

Ordering Information

Part Number	Quantity	Packaging Option
8KPXXCA	250	Box

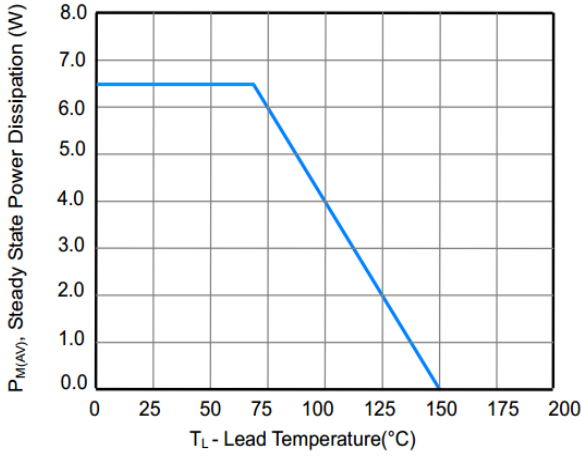
Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power (10/1000 μs)	Ppk	8000	W
Peak Pulse Current (10/1000 μs)	IPP	See Next Table	A
Power Dissipation On Infinite Heat Sink at $T_L=75^{\circ}\text{C}$	PM(AV)	8.0	Watt
Operating Temperature Range	TJ	-55 to +125	$^{\circ}\text{C}$
Storage Temperature Range	Tstg	-55 to +150	$^{\circ}\text{C}$

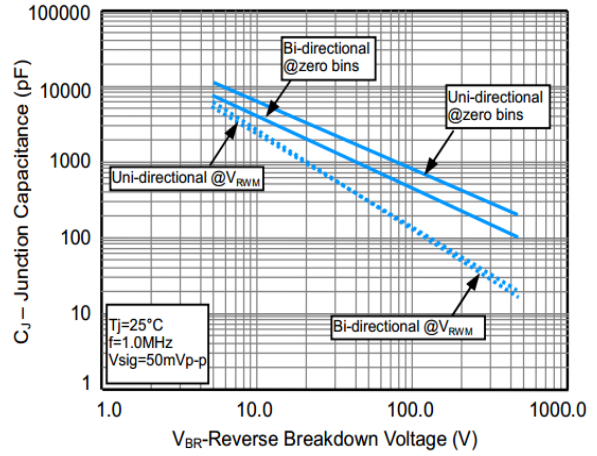
Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise specified)

Part Number (Uni)	Part Number (Bi)	Reverse Stand off Voltage VR (Volts)	Breakdown Voltage VBR (Volts) @ IT		Test Current IT (mA)	Maximum Clamping Voltage VC @ Ipp (V)	Maximum Peak Pulse Current Ipp (A)	Maximum Reverse Leakage IR @ VR (μA)
			MIN	MAX				
8KP24A	8KP24CA	24	26.7	29.5	1	38.9	206	5
8KP33A	8KP33CA	33	36.7	40.6	1	53.3	150	5
8KP36A	8KP36CA	36	40.0	44.2	1	58.1	148	5
8KP40A	8KP40CA	40	44.4	49.1	1	64.8	124	5
8KP43A	8KP43CA	43	47.8	52.8	1	69.4	115	5

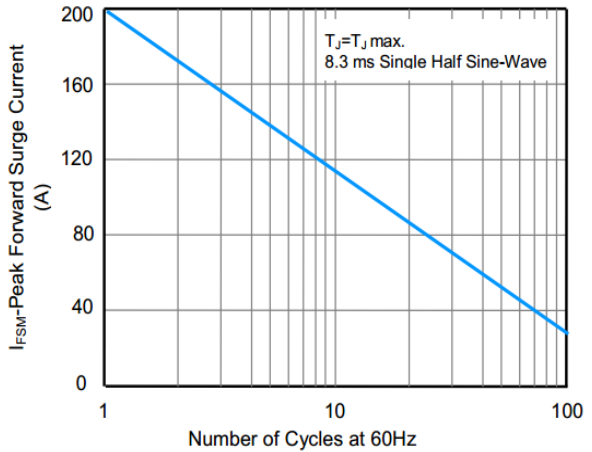
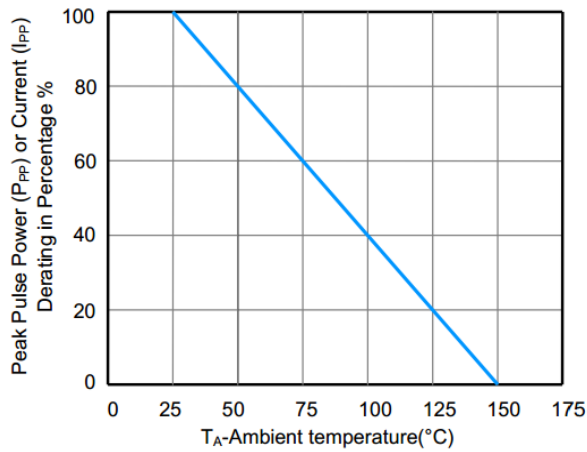
Typical Performance Characteristics ($T_A=25^\circ\text{C}$ unless otherwise Specified)



Pulse Derating Curve

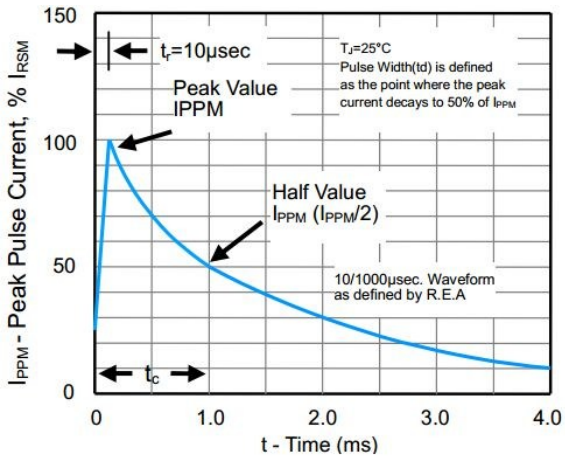


Typical Junction Capacitance

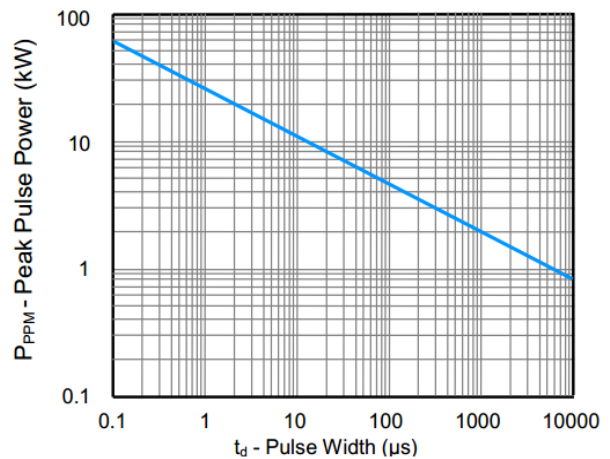


Peak Forward Surge Current

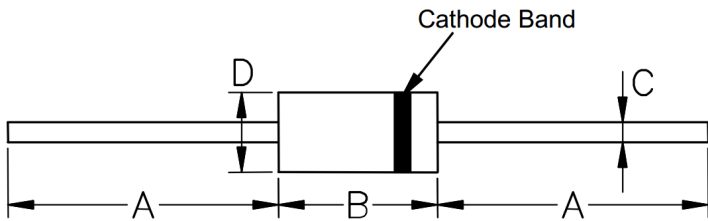
Steady State Power Dissipation Derating Curve



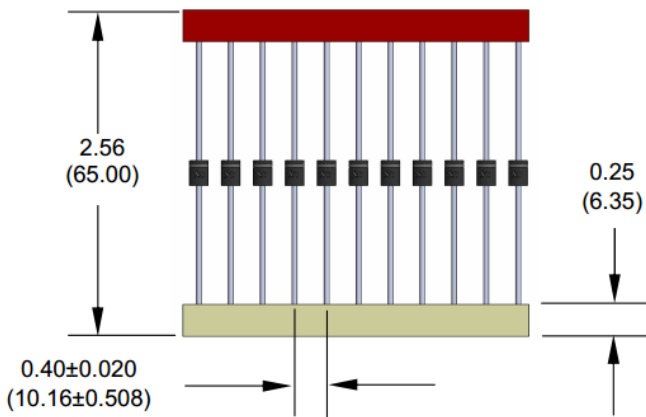
Pulse Waveform



Peak Pulse Power Rating

R6/P600 Package Outline Drawing


SYM	DIMENSIONS			
	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.000	—	25.40	—
B	0.340	0.360	8.64	9.14
C	0.048	0.052	1.22	1.32
D	0.340	0.360	8.64	9.14

Packaging Dimensions Unit: Inches (Millimeters)

Contact Information

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