

Silicon Avalanche Diodes

Unpackaged High Power Transient Voltage Suppressors

15KP CELLS



Designed to protect sensitive electronics which operate within an environment of lightning induced, short duration, high current pulses.

The 15KP cell series is specifically designed for high power, space limited applications. The cell construction provides three high power T.V.S. die connected in series via heat sinking electrodes.

Devices can be soldered to a substrate via one electrode; connection to the other electrode can then be made by soldering a suitable jumper.

These devices are designed so they can be used in series/parallel configuration in order to provide a very high power capability that is a far superior solution than using Metal Oxide Varistors. The low clamping voltage, high speed response and infinite life (if the maximum rating is not exceeded) make this ultimate protection for sensitive electronics.

FEATURES

- 144,000 watts Peak Pulse Power based on 8/20 μ S (applies to a single device).

Devices can be arranged in series/parallel to increase surge handling capability.



Characteristics @25°C case temp (unless otherwise noted)

Part Number	Working voltage (V _r)	Breakover Voltage (b _v) @I _t		Maximum leakage current (I _r) @ V _r	Minimum clamping voltage (V _{cl}) @ I _{pp}	Maximum Peak Pulse Current (I _{pp}) @ V _{cl} (Note 3)
		min	I _t			
	volts	volts	mA	μ A	volts	amps
15KP66CA	66	73.2	1.0	10.0	35.0	1500

Note 3. Using 8/20 μ S pulse as defined by ITU.

Other voltages are available on request.

Individual 5KP cells also available, please contact sales for details.

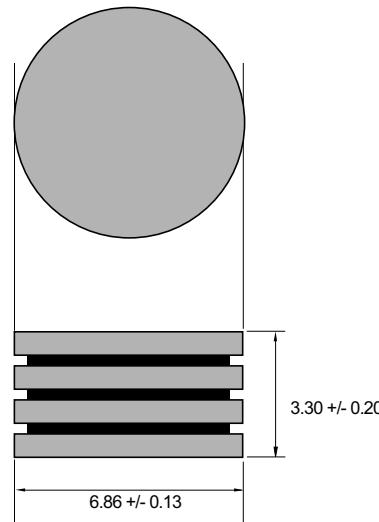
ABSOLUTE MAXIMUM RATINGS @25°C case temp (unless otherwise noted)

SYMBOL	PARAMETER	VALUE	UNITS
PPP	Peak Pulse Power 8-20 μ sec. Pulse	144,000	W
PM (AV)	Steady state power dissipation (note 1)	6.5	W
V _f	Maximum instantaneous forward voltage @100amps (note 2)	10.5	V
T _j	Junction Temperature	-55 to 150	°C
T _{stg}	Storage Temperature	-55 to 150	°C

Note 1. Mounted on copper pad area 40mm square.

Note 2. Using 300 microsecond square pulse; applies to unidirectional only, and a single device only.

For devices used in series, this value should be multiplied by the number of devices.



All dimensions in mm unless otherwise stated