

RoHS Compliant Product

A suffix of "-C" specifies halogen and lead-free

## DESCRIPTION

The SD36 is designed for applications requiring transient overvoltage protection capability. They are intended for use in voltage and ESD sensitive equipment such as computers, printers, business machines, communication systems, medical equipment and other applications. These devices are ideal for situations where board space is at a premium.

This has been specifically designed to protect sensitive components which are connected to power, data and transmission lines from overvoltage caused by ESD (electrostatic discharge), CDE (Cable Discharge Events), and EFT (electrical fast transients).

## FEATURES

- IEC61000-4-2 (ESD)  $\pm 15\text{kV}$  (air),  $\pm 8\text{kV}$  (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- 350 Watts Peak Pulse Power per ( $t_p=8/20\mu\text{s}$ )
- Protects One I/O Line (Uni-directional)
- Low Clamping Voltage
- Working Voltages : 36V
- Low Leakage Current

## APPLICATIONS

- Cell Phone Handsets and Accessories
- Microprocessor Based Equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Networking and Telecom
- Serial and Parallel Ports
- Peripherals

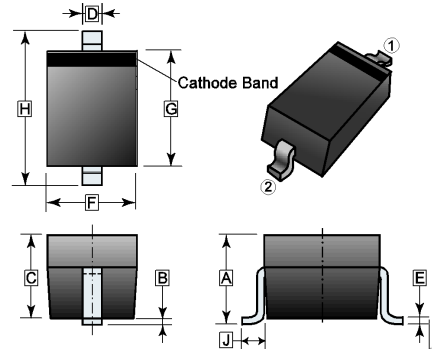
## MARKING

36W

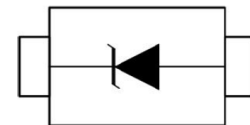
## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOD-323	3K	7 inch

## SOD-323



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.05 REF.		F	1.15	1.45
B	0.20 REF.		G	1.6	1.8
C	0.80	1.00	H	2.55	2.75
D	0.25	0.40	J	0.475 REF.	
E	0.080	0.180			



Uni-directional

**ABSOLUTE MAXIMUM RATINGS** ( $T_A=25^\circ\text{C}$  unless otherwise specified)

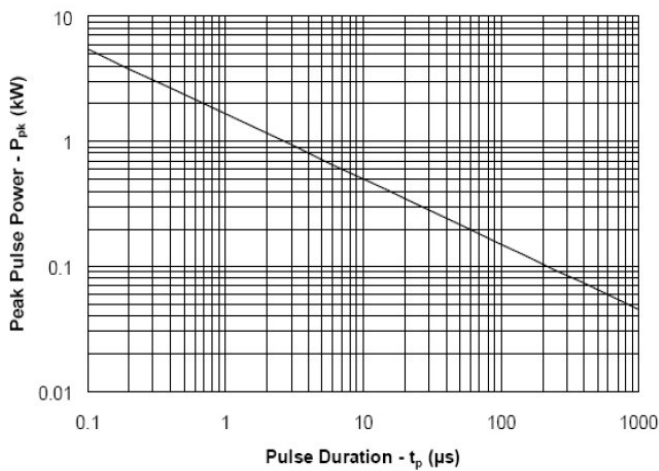
Rating		Symbol	Value	Unit
ESD Voltage(IEC61000-4-2)	Air Model	$V_{ESD}$	$\pm 15$	kV
	Contact Model		$\pm 8$	
Peak Pulse Power@ $t_p=8/20\mu\text{s}$ pulse waveform		$P_{PP}$	350	W
Maximum Lead Solder Temperature@ 10 second duration		$T_L$	260	$^\circ\text{C}$
Operating Junction and Storage Temperature Range		$T_J, T_{STG}$	-55~150	$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS** ( $T_A=25^\circ\text{C}$  unless otherwise specified)

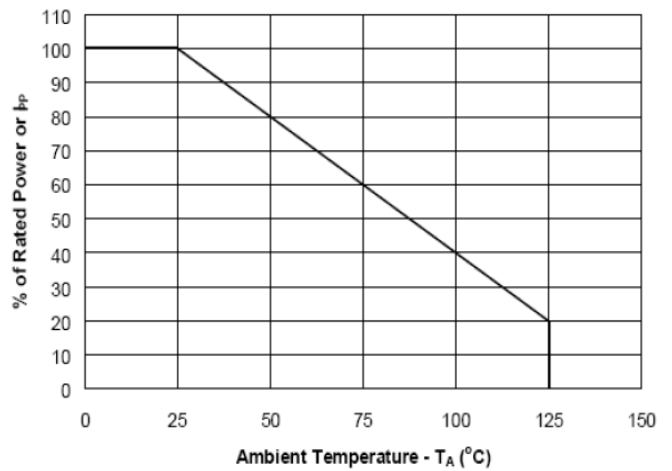
Device	$V_{RWM}$ (V)	$V_B$ (V)	$I_T$ (mA)	$V_C@1A$ (V)	$V_C@5A$ (V)	$I_R$ ( $\mu\text{A}$ )	$C_T$ (pF)
	Max.	Min.		Max.	Max.	Max.	Max.
SD36	36	40	1	60	75	1	60

**ELECTRICAL CHARACTERISTICS CURVE**

**Non-Repetitive Peak Pulse Power vs. Pulse Time**



**Power Derating Curve**



**Pulse Waveform**

