



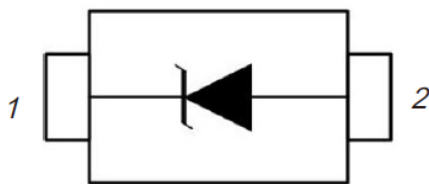
DESCRIPTION

The SD03~SD36 is available in SOD-323 package.

ORDERING INFORMATION

Package Type	Part Number
SOD-323	SD03
	SD05
	SD12
	SD15
	SD18
	SD20
	SD24
	SD36
Note	SPQ:3,000pcs/Reel
AiT provides all RoHS Compliant Products	

PIN DESCRIPTION



FEATURES

- IEC6100-4-2 (ESD) $\pm 15\text{kV}$ (air), $\pm 8\text{kV}$ (contact)
- IEC6100-4-4 (EFT) 40A (5/50ns)
- 350 Watts Peak Pulse Power per (tp=8/20μs)
- Protects one I/O line (unidirectional)
- Low clamping voltage
- Working voltage: 3.3V to 36V
- Low leakage current
- Available in SOD-323 package

MECHANICAL DATA

SOD-323 package

High temperature soldering: 260°C/10s

APPLICATIONS

- Switches / Buttons
- Test Equipment / Instrumentation
- Point-of-Sale Terminals
- Medical Equipment
- Cell Phone Handsets and Accessories
- Microprocessor base equipment
- Personal Digital Assistants (PDA's)
- Notebooks, Desktops, and Servers
- Portable Instrumentation
- Networking and Telecom
- Serial and Parallel Ports
- Peripherals



ABSOLUTE MAXIMUM RATINGS

T_A=25°C

V _{ESD} , ESD per IEC 61000-4-2	Air	±15kV
	Contact	±8kV
P _{PP} , Peak Pulse Power (8/20μs)		350W
T _{OPT} , Operating Temperature		-55°C ~ +150°C
T _{STG} , Storage Temperature		-55°C ~ +150°C
T _L , Lead Soldering Temperature (10sec.)		260°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ELECTRICAL CHARACTERISTICS

T_{amb}=25°C

Part Number	V _{RWM} (V) Max.	V _B (V) Min.	I _T (mA)	V _{C@1A} (V) Max.	V _C (V)		I _R (μA) Max	C _T (pF) Max.
					Max	@A		
SD03	3.3	4	1	6.5	10.5	20	40	450
SD05	5	6	1	9.8	18	17	10	300
SD12	12	13.3	1	19	32	11	1	130
SD15	15	16.7	1	24	38	10	1	120
SD18	18	20.0	1	29	45	9	1	100
SD20	20	22.3	1	35	50	8	1	90
SD24	24	26.7	1	43	52	7	1	80
SD36	36	40	1	60	75	5	1	60



TYPICAL CHARACTERISTICS

Figure1. Pulse Waveform

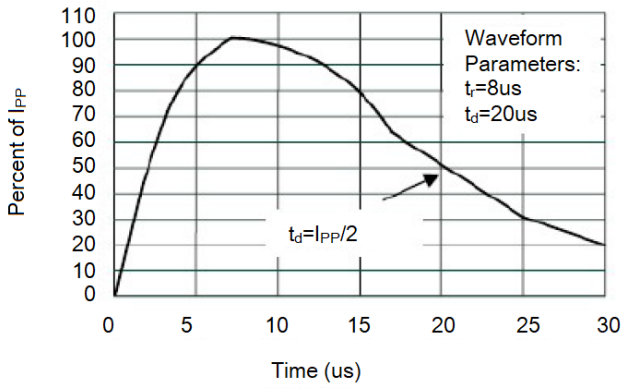
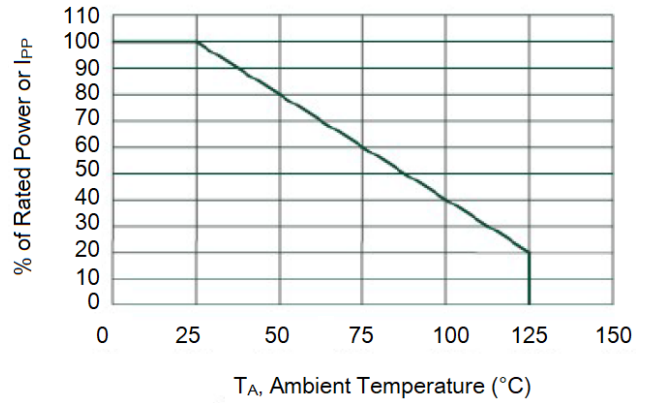


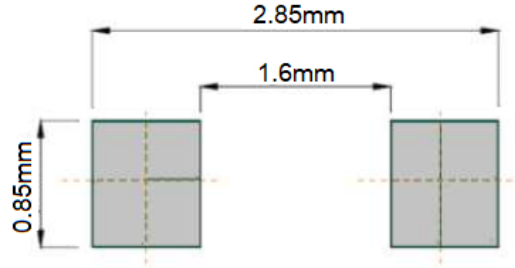
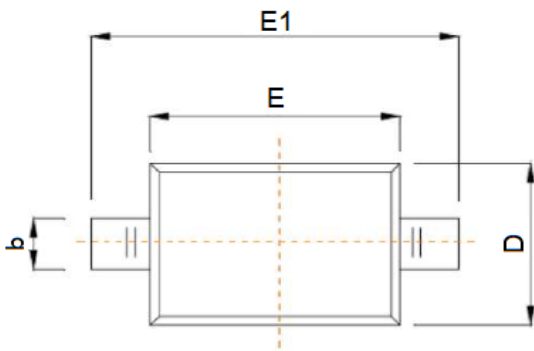
Figure 2. Power Derating Curve



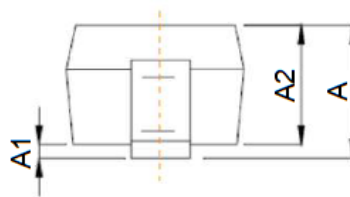
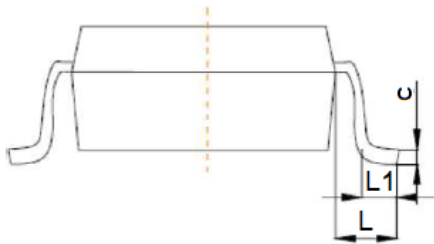


PACKAGE INFORMATION

Dimension in SOD-323 Package (Unit: mm)



Recommended Pad outline



DIM	MIN	MAX
A	-	1.000
A1	0.000	0.110
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
e	1.800	2.040
L	0.475 REF	
L1	0.250	0.400
θ	0°	8°



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