

SOD-323 Plastic-Encapsulate ESD Protection Diodes

Features

- Low leakage current
- SOD-323 surface mount package
- IEC 61000-4-2 (ESD Air): ±15kV
- IEC 61000-4-2 (ESD Contact): ±8kV
- IEC 61000-4-5 (Lightning 8/20μs): 25A

Applications

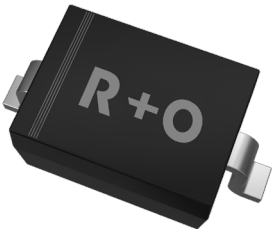
- LED Lighting Modules
- RS232/RS485
- CAN and LIN Bus
- Portable Instrumentation
- General Purpose I/O
- Automotive application

Function Diagram



Reverse Working Voltage
5V Max.
Small capacitance
1.5pF(Max.)

SOD-323

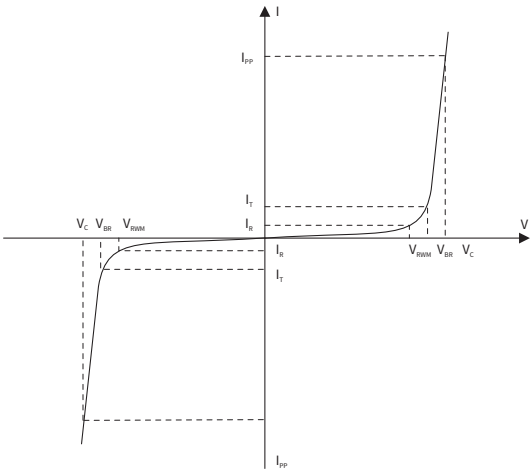


Maximum Ratings (Ta=25°C Unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{ESD}	Electrostatic Discharge Voltage	ESD per IEC 61000-4-2(Air)	±15	KV
		ESD per IEC 61000-4-2(Contact)	±8	KV
P _{PP}	Peak Pulse Power	tp = 8/20 μs	500	W
I _{PP}	Rated Peak Pulse Current	tp = 8/20 μs	25	A
T _J	Operating JunctionTemperature Range	—	-55 to +125	°C
T _{STG}	Operating JunctionTemperature Range	—	-55 to +150	°C

Electrical Parameter

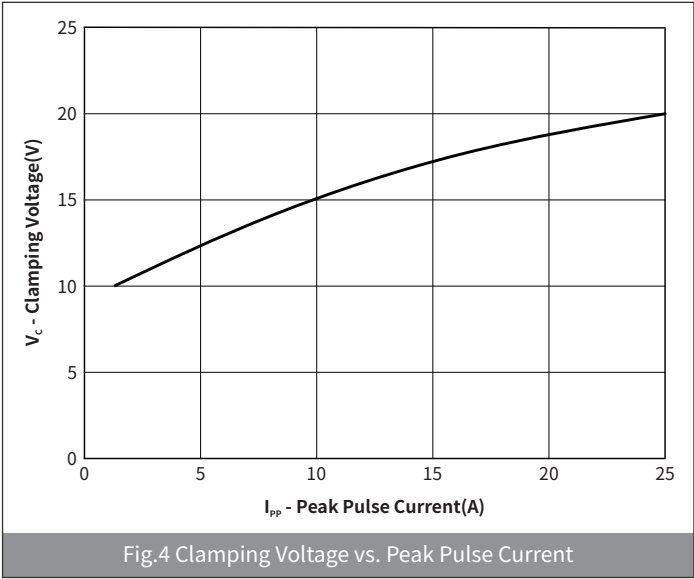
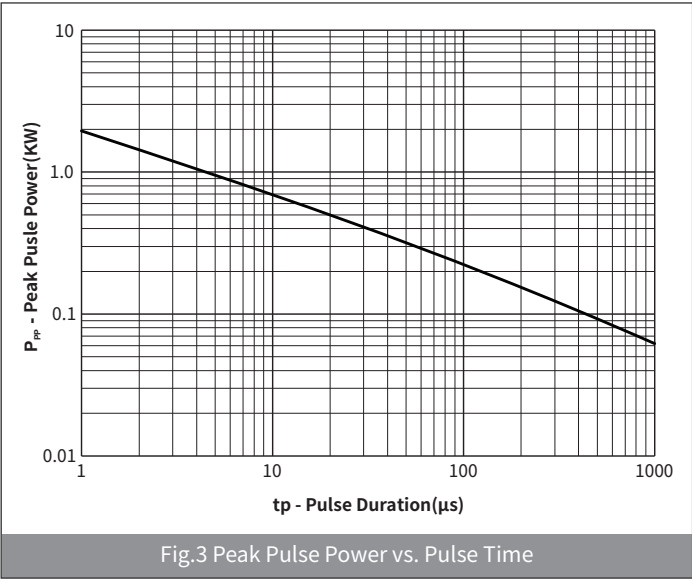
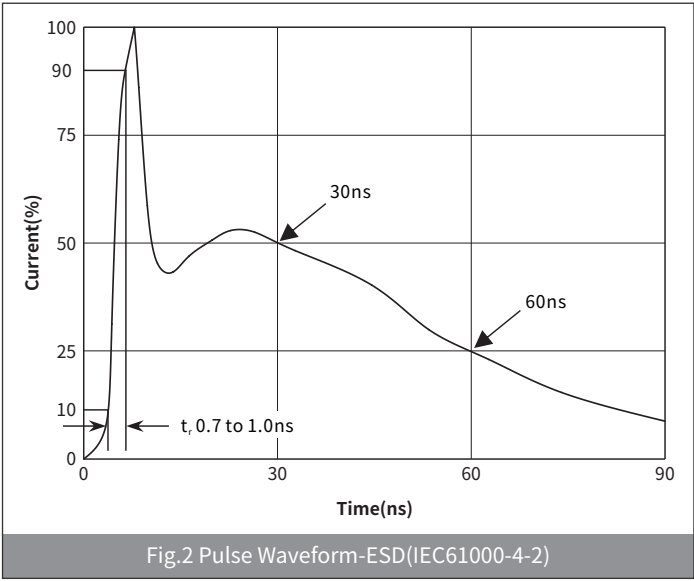
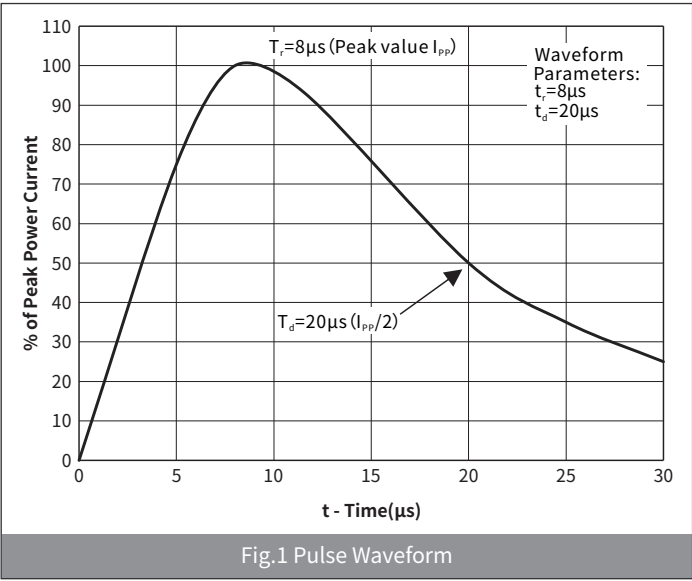
SYMBOL	PARAMETER
V _C	Clamping Voltage @ I _{PP}
V _{BR}	Breakdown Voltage @ I _T
I _{PP}	Peak Pulse Current
I _T	Test Current
I _R	Reverse Leakage Current @ VRWM
V _{RWM}	Peak Reverse Working Voltage
P _{PP}	Peak Pulse Power Dissipation
C _J	Junction Capacitance @ V _R =0V,f=1MHz
I _F	Forward Current
V _F	Forward Voltage @I _F



● **Electrical Characteristics** (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	CONDITION	Min	Typ	Max	UNIT
Peak Reverse Working Voltage	V_{RWM}	$T_a=25^{\circ}C$	—	—	5	V
Breakdown Voltage	V_{BR}	$I_R=1mA, T_a=25^{\circ}C$	6.2	—	9	V
Reverse Leakage Current	I_R	$V_R=5V, T_a=25^{\circ}C$	—	—	0.2	μA
Clamping Voltage	V_C	$I_{PP}=1A, t_p=8/20\mu s$	—	—	10.5	V
		$I_{PP}=25A, t_p=8/20\mu s$	—	—	20	
Junction Capacitance	C_J	$V_R=0V, f=1MHz$	—	—	1.5	pF

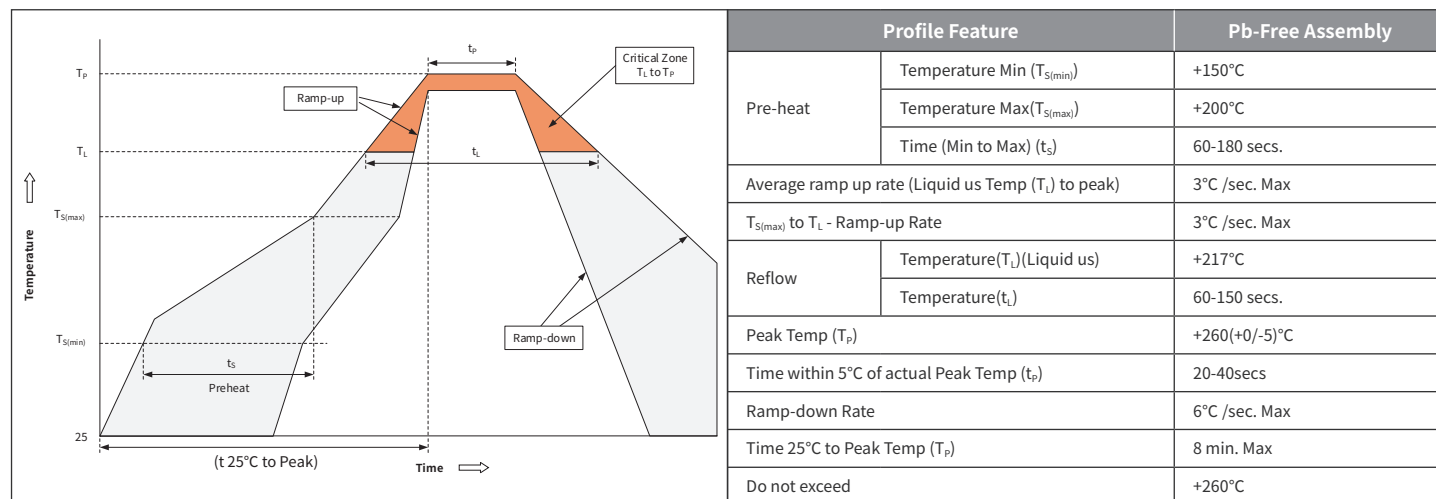
● **Ratings And Characteristics Curves** (Ta=25°C Unless otherwise specified)



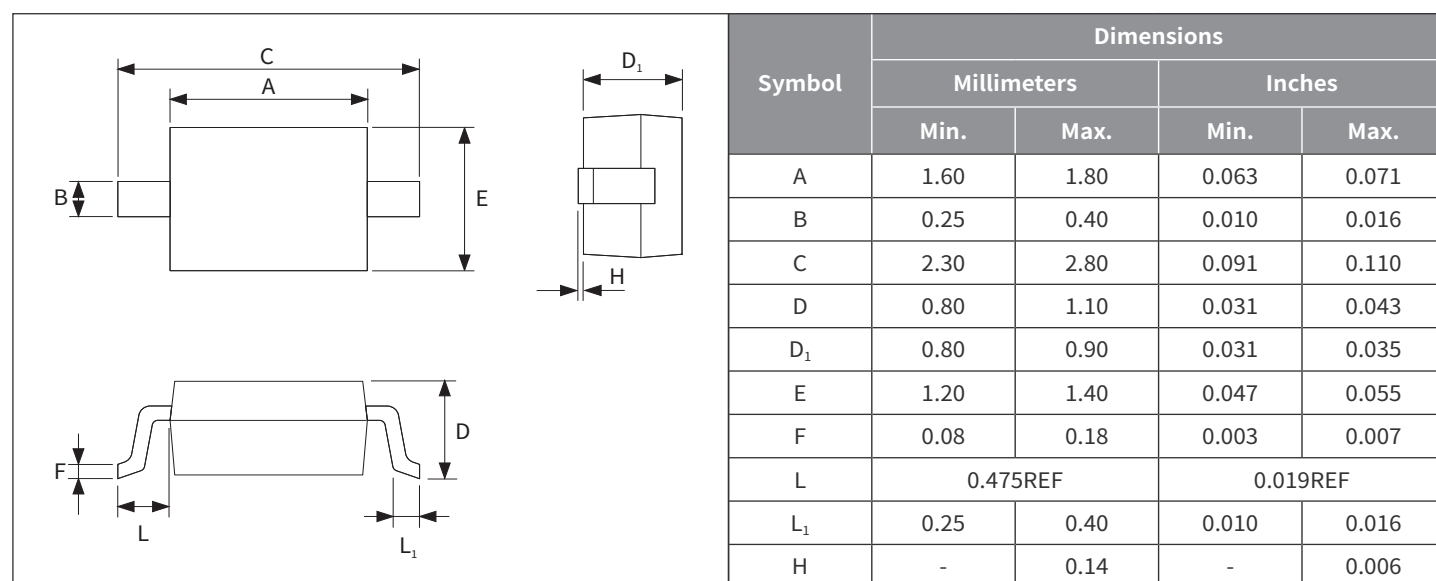
Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SOD-323	R1	0.0048	3000	45000	180000	7"

Recommended Soldering Conditions



Package Outline Dimensions (SOD-323)



Suggested Pad Layout

