

SOD-123FL Plastic-Encapsulate ESD Protection Diodes

Features

- Low leakage current
- Low clamping voltage
- IEC 61000-4-2 (ESD Air): ±30kV
- IEC 61000-4-2 (ESD Contact): ±30kV
- IEC 61000-4-5 (Lightning 8/20μs): 140A

Applications

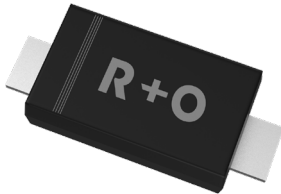
- I/O Interface.
- AC/DC Power supply
- Notebooks and Handhelds
- Portable Instrumentation, Digital Cameras
- Peripherals, Audio Players, Industrial Equipment

Function Diagram



Reverse Working Voltage
20.0V Max.
High capacitance
310pF(Typ.)

SOD-123FL

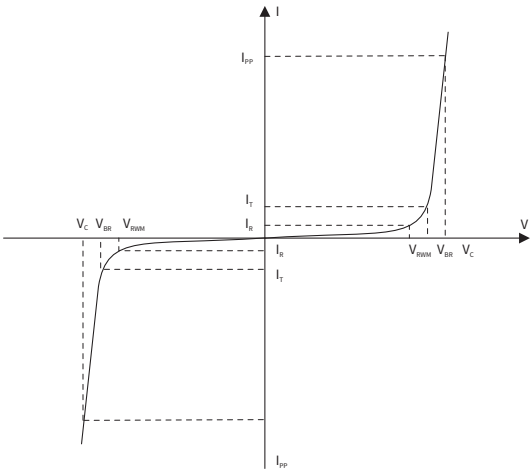


Maximum Ratings (Ta=25°C Unless otherwise specified)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
VESD	Electrostatic Discharge Voltage	ESD per IEC 61000-4-2(Air)	±30	KV
		ESD per IEC 61000-4-2(Contact)	±30	KV
P _{PP}	Peak Pulse Power	tp = 8/20 μs	4800	W
I _{PP}	Rated Peak Pulse Current	tp = 8/20 μs	140	A
T _J	Operating JunctionTemperature Range	—	-55 to +150	°C
T _{STG}	Operating JunctionTemperature Range	—	-55 to +150	°C

Electrical Parameter

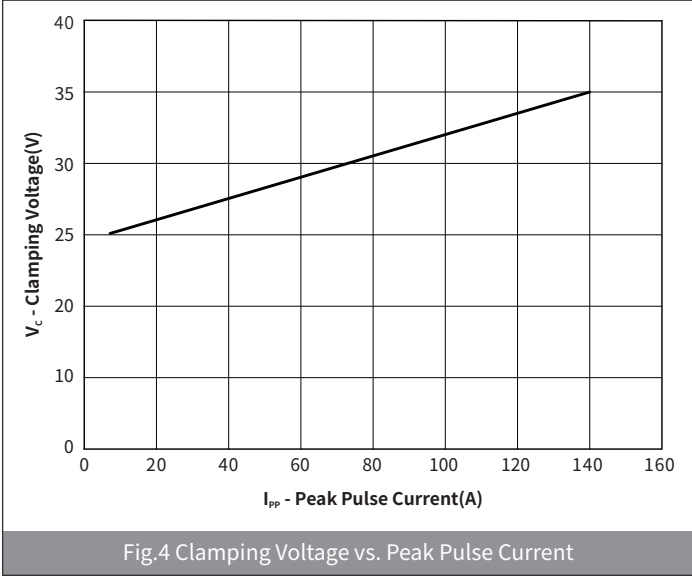
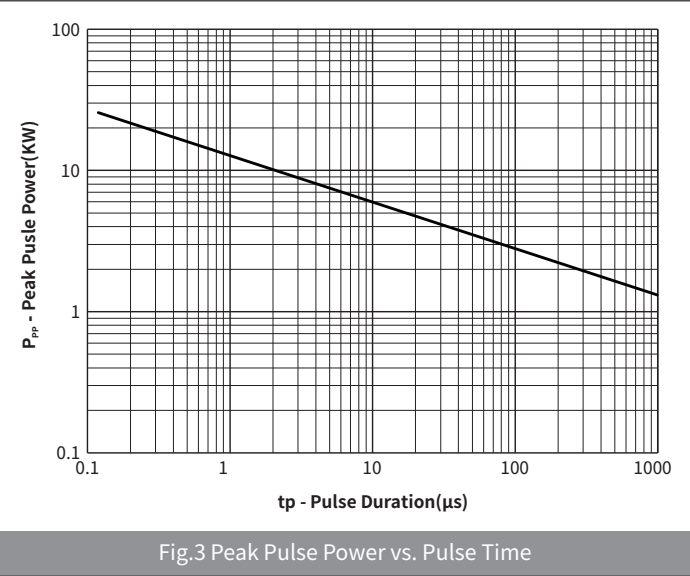
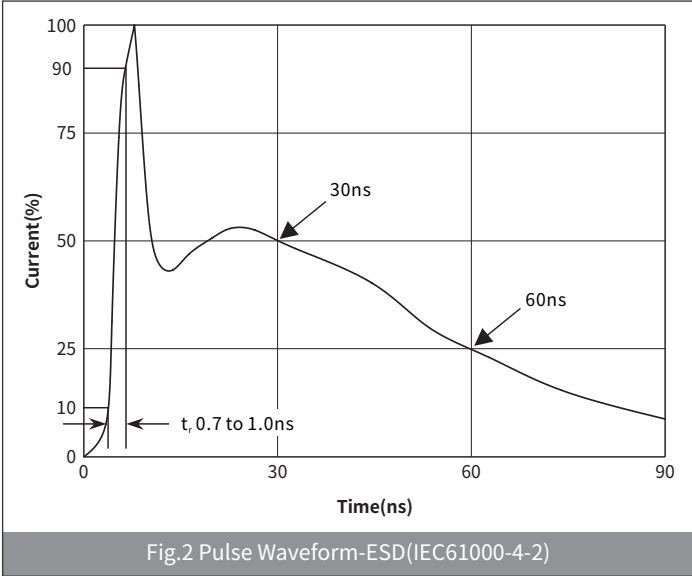
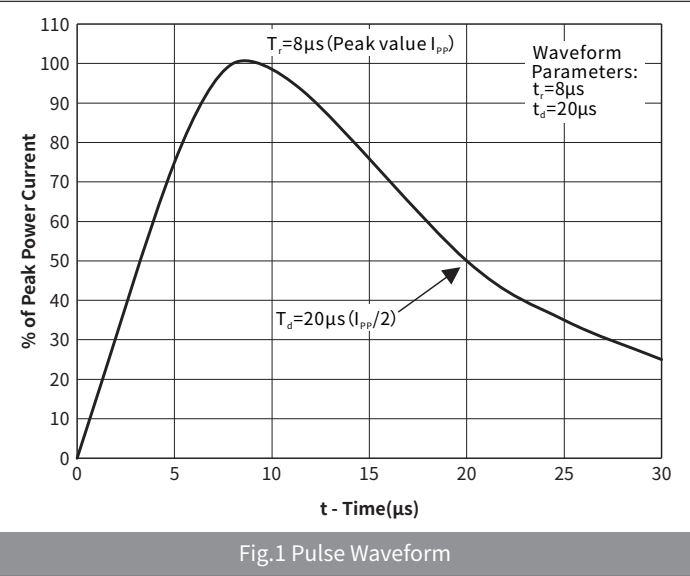
SYMBOL	PARAMETER
V _C	Clamping Voltage @ I _{PP}
V _{BR}	Breakdown Voltage @ I _T
I _{PP}	Peak Pulse Current
I _T	Test Current
I _R	Reverse Leakage Current @ VRWM
V _{RWM}	Peak Reverse Working Voltage
P _{PP}	Peak Pulse Power Dissipation
C _J	Junction Capacitance @ V _R =0V,f=1MHz
I _F	Forward Current
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}	$T_a=25^{\circ}C$	—	—	20.0	V
Breakdown Voltage	V_{BR}	$I_T=1.0mA, T_a=25^{\circ}C$	22.2	—	24.5	V
Reverse Leakage Current	I_R	$V_{RWM}=20.0V, T_a=25^{\circ}C$	—	—	1.0	μA
Clamping Voltage	V_C	$I_{PP}=140A, t_p=8/20\mu s$	—	—	35.0	V
Junction Capacitance	C_J	$V_{RWM}=0V, f=1MHz$	—	310	—	pF

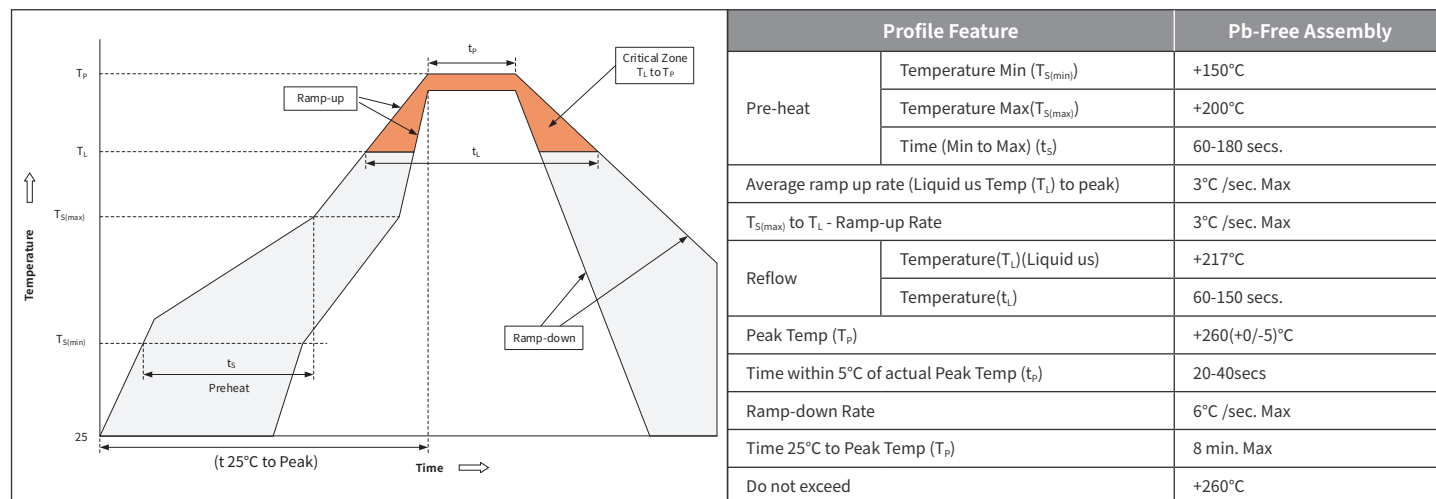
● Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



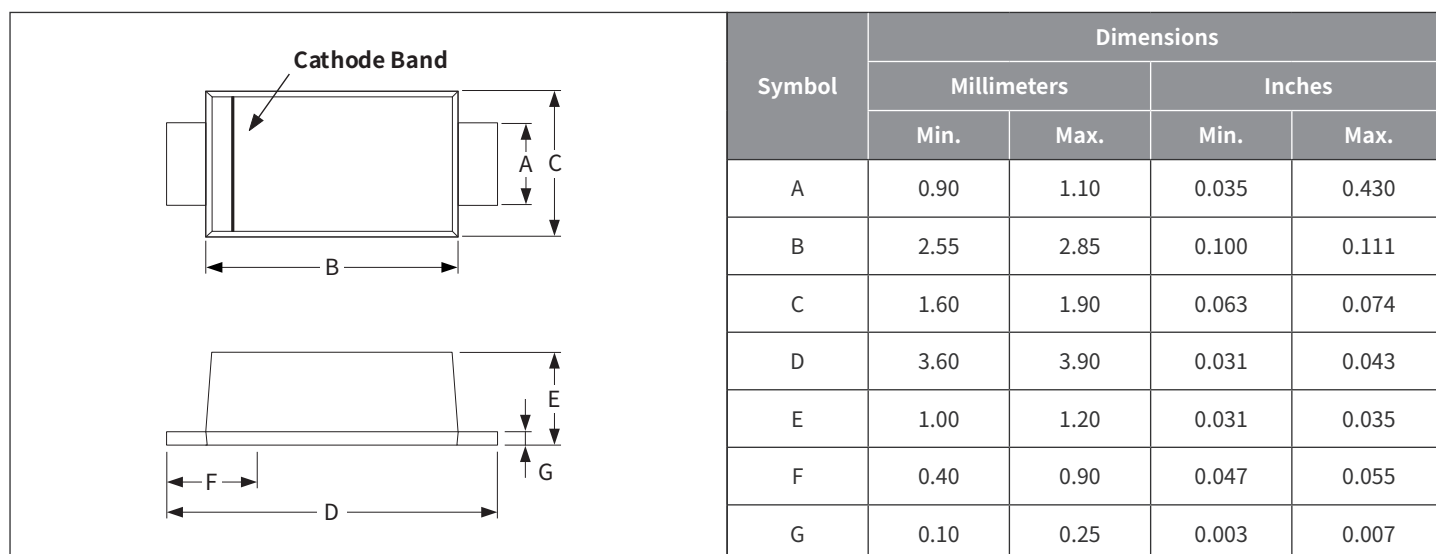
Ordering Information

PACKAGE	PACKAGE CODE	UNIT WEIGHT(g)	REEL(pcs)	BOX(pcs)	CARTON(pcs)	DELIVERY MODE
SOD-123FL	R1	0.0169	3000	45000	180000	7"

Recommended Soldering Conditions



Package Outline Dimensions (SOD -123FL)



Suggested Pad Layout

