

FEATURES

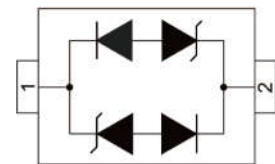
- ✧ 350 watts peak pulse power per line ($t_p=8/20\mu s$)
- ✧ Protects one bi-directional I/O line
- ✧ Low clamping voltage
- ✧ Working voltages: 12V
- ✧ Low leakage current
- ✧ RoHS compliant



SOD-323

MAIN APPLICATIONS

- ✧ Cell phone handsets and accessories
- ✧ Microprocessor based equipment
- ✧ Personal digital assistants (PDA's)
- ✧ Notebooks, desktops, and servers
- ✧ Portable instrumentation
- ✧ Peripherals
- ✧ USB interface



PIN Configuration

MECHANICAL CHARACTERISTICS

- ✧ SOD-323 package
- ✧ Molding compound flammability rating: UL 94V-0
- ✧ Weight 5 milligrams (approximate)
- ✧ Quantity per reel: 3,000pcs
- ✧ Lead finish: lead free
- ✧ Marking code: DC

ABSOLUTE MAXIMUM RATINGS (T_A=25°C, RH=45%-75%, unless otherwise noted)

Rating	Symbol	Value	Unit
Peak pulse power (tp=8/20μs waveform)	P _{PP}	350	W
ESD voltage (Contact discharge)	V _{ESD}	±30	kV
ESD voltage (Air discharge)		±30	
Lead soldering temperature	T _L	260	°C
Storage & operating temperature range	T _{STG} , T _J	-55~+150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse stand-off voltage	V _{RWM}				12	V
Reverse breakdown voltage	V _{BR}	I _{BR} =1mA	13.3			V
Reverse leakage current	I _R	V _R =12V			1	μA
Clamping voltage (tp=8/20μs)	V _C	I _{PP} =1A			19	V
Clamping voltage (tp=8/20μs)	V _C	I _{PP} =6A			28.6	V
Peak Pulse Current (tp=8/20μs)	I _{PP}				7	A
Off state junction capacitance	C _J	0Vdc, f=1MHz		0.8		pF

RATINGS AND V-I CHARACTERISTICS CURVES (T_A=25°C, unless otherwise noted)

FIG.1: V- I curve characteristics (Bi-directional)

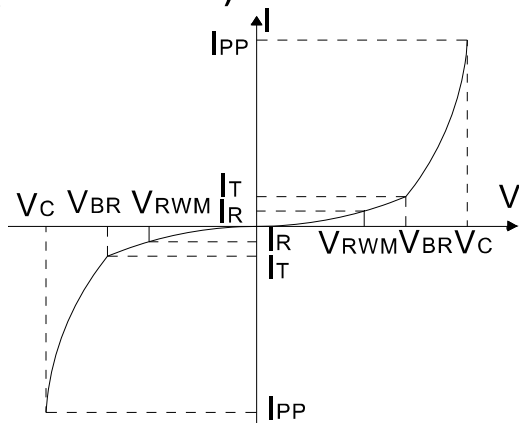


FIG.2: Pulse waveform (8/20μs)

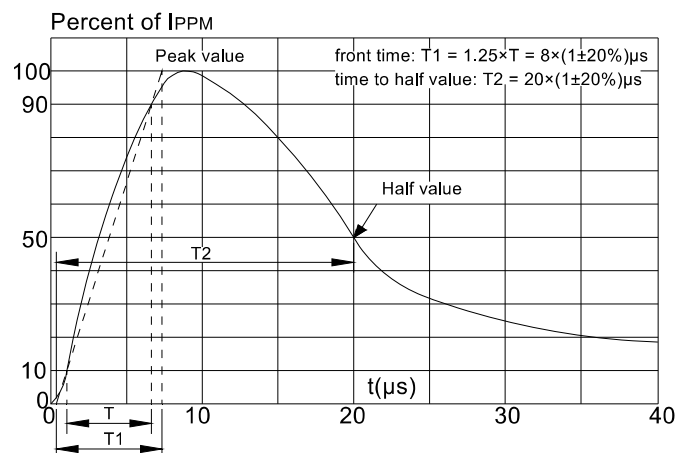


FIG.3: Pulse derating curve

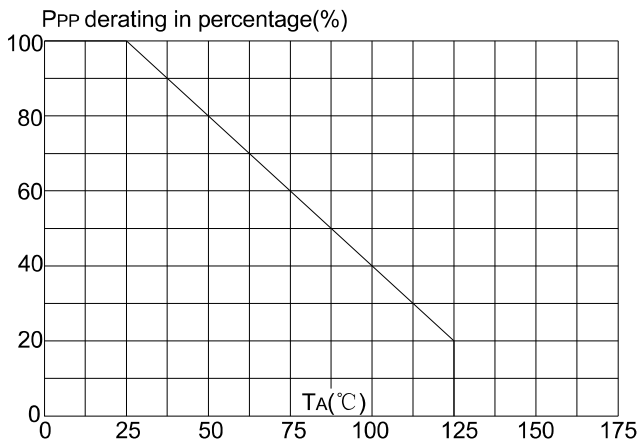
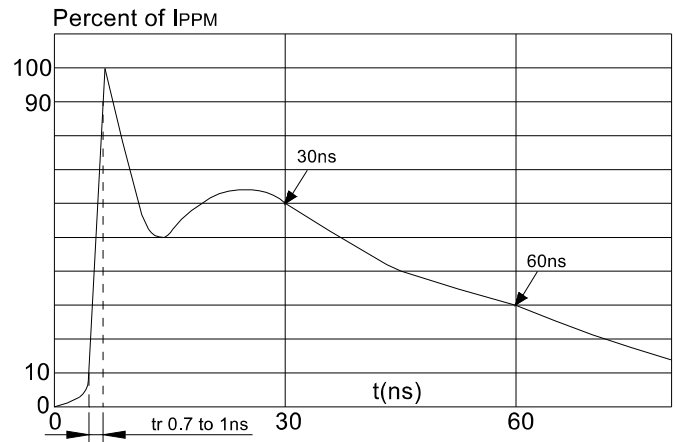
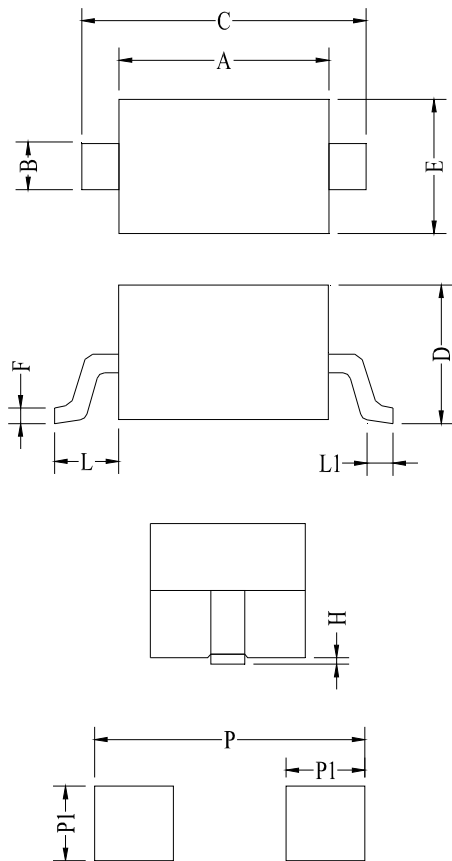


FIG.4: ESD clamping (8KV contact)



PACKAGE MECHANICAL DATA



Land Pattern

Symbol	Millimeter		Inches	
	Min	Max	Min	Max
A	1.60	1.80	0.063	0.071
B	0.25	0.35	0.010	0.014
C	2.50	2.70	0.098	0.106
D	0.00	1.00	0.000	0.039
E	1.20	1.40	0.047	0.055
F	0.08	0.15	0.003	0.006
L	0.475REF		0.019REF	
L1	0.25	0.40	0.010	0.016
H	0.00	0.10	0.000	0.004
P	3.00		0.118	
P1	0.80		0.031	