FSBV08C

Bidirectional Ultra Low Capacitance TVS Array

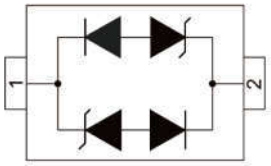
FEATURES

- 350 watts peak pulse power per line (t_P=8/20μs)
- Protects one bi-directional I/O line
- Low clamping voltage
- Working voltages: 8V
- 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: BC

ABSOLUTE MAXIMUM RATINGS (T_A=25℃, 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}	±8	kV
ESD voltage (Air discharge)		±15	
Lead soldering temperature	T_L	260	℃
Storage & operating temperature range	T_{STG} ,T_J	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_A=25℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Reverse stand-off voltage	V_{RWM}				8	V
Reverse breakdown voltage	V_{BR}	I_{BR}=1mA	8.5			V
Reverse leakage current	I_R	V_R=8V			1	μA
Clamping voltage (tp=8/20μs)	V_C	I_{PP}=1A			13.4	V
Clamping voltage (tp=8/20μs)	V_C	I_{PP}=8A			18.5	V
Peak Pulse Current (tp=8/20μs)	I_{PP}				10	A
Off state junction capacitance	C_J	0Vdc,f=1MHz		1		pF

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

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

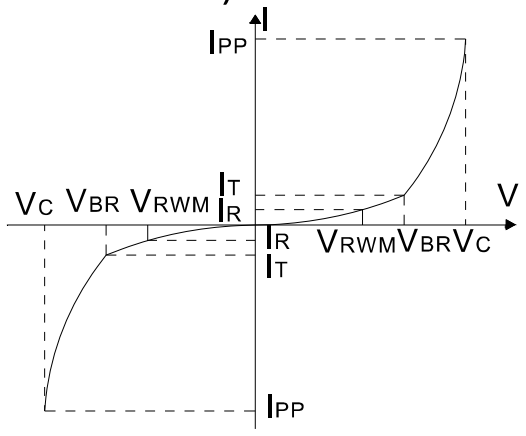


FIG.2: Pulse waveform (8/20μs)

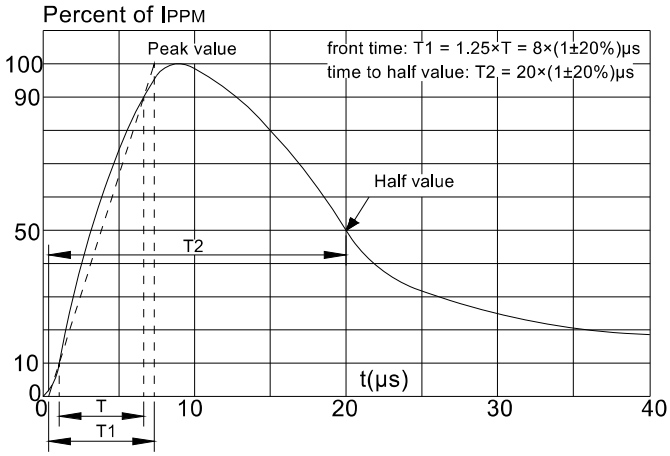


FIG.3: Pulse derating curve

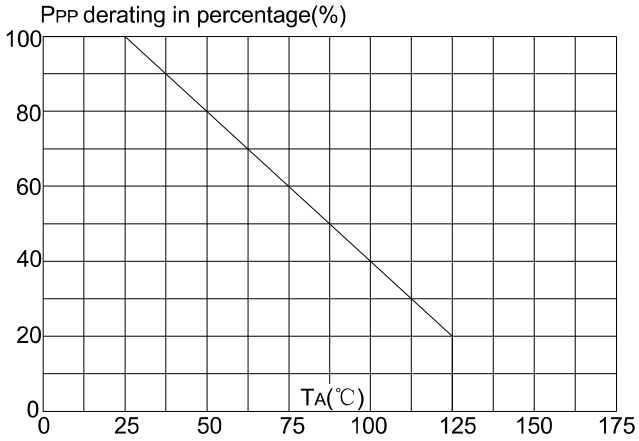
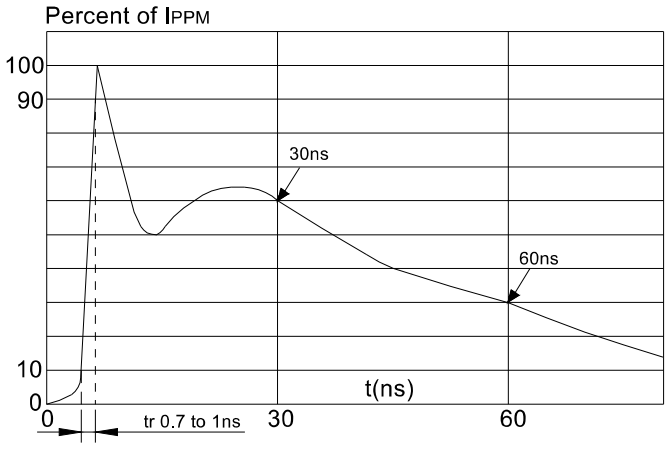
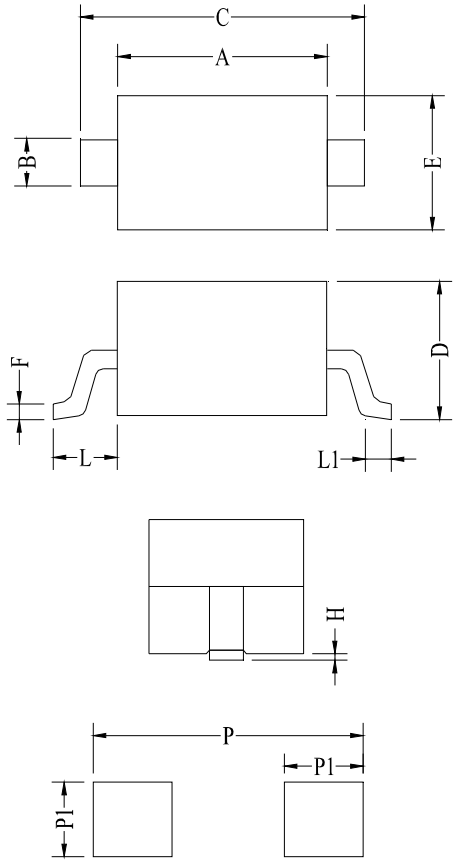


FIG.4: ESD clamping (8KV contact)



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	