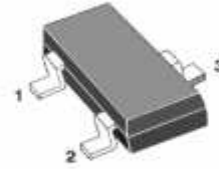


Description

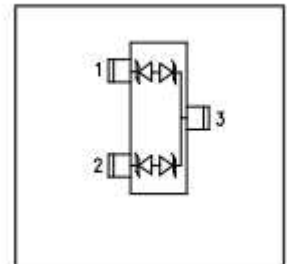
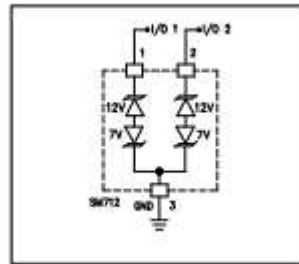
This device is designed to protect voltage sensitive components from ESD. Excellent clamping capability, low leakage, and fast response time provide best in class protection on designs that exposed to ESD.

Features

- 400W peak pulse power per line (tP = 8/20μs)
- SOT-23 package
- Protects two +12V to -7V lines
- Protects one power or I/O port
- ESD protection > 35 kV
- Low clamping voltage
- RoHS compliant
- Transient protection for data lines to IEC 61000-4-2(ESD) ±15KV(air), ±8KV(contact); IEC 61000-4-4 (EFT) 40A (5/50ns)



SOT23



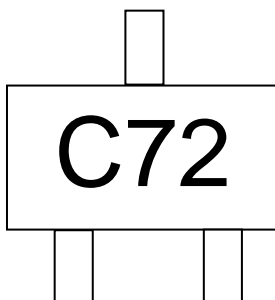
Application

- Protection of RS-485 transceivers with extended common-mode range
- Security systems
- Automatic Teller Machines
- HFC systems
- Networks

Order information

Device	Package	Net Weight	Carrier	Quantity	HSF Status
EC76SM712B1R	SOT23	0.0090g	Tape & Reel	3000pcs	RoHS compliant

Marking





Absolute Maximum Ratings

(TA=25°C, Unless otherwise specified.)

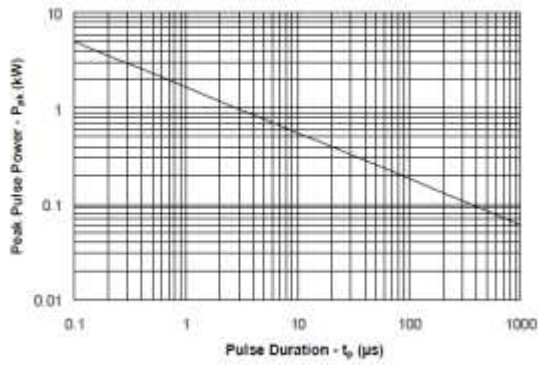
Rating	Symbols	Value	Units
Unidirectional Peak Pulse Power (TP=8/20μS)	PPP	400	W
Operating Temperature	TJ	-55-150	°C
Storage temperature	TSTG	-50-150	°C

Electrical Characteristics per line

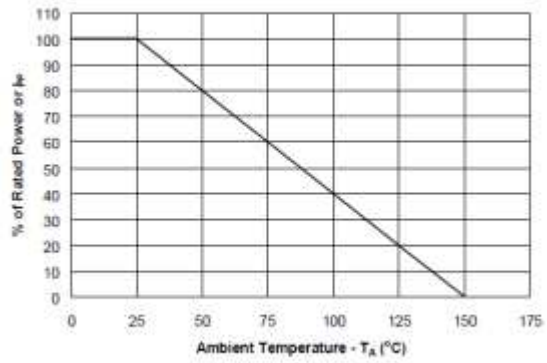
Parameter	Symbols	Conditions	Pins 1 to 3 and 2 to 3 (12V TVS)			Pins 3 to 1 and 3 to 2 (7V TVS)			Units
			Min	Typ	Max	Min	Typ	Max	
Reverse stand-off Voltage	VRWM				12			12	V
Reverse Breakdown Voltage	VBR	IT=1mA	13.3			7.5			V
Reverse Leakage Current	IR	VRWM=5V, T=25°C			1			20	μA
Clamping Voltage	VC	IPP=5A , TP=8/20μS			20			20	V
		IPP=17A , TP=8/20μS			26			12	V
Junction Capacitance	CJ	VR=0V, f=1MHz			75			75	pF
		VR=VRWM, f=1MHz		45			45		pF

Typical Characteristic

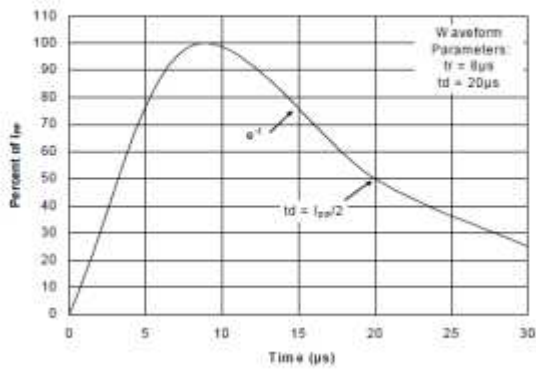
Non-Repetitive Peak Pulse Power vs. Pulse Time



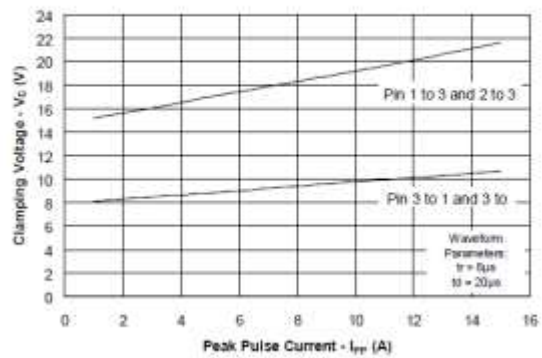
Power Derating Curve



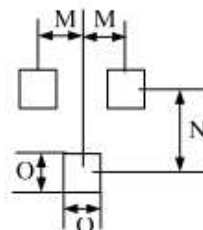
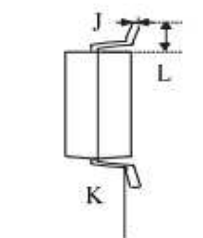
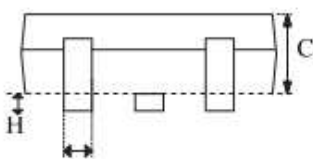
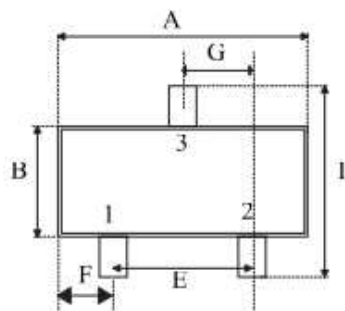
Pulse Waveform



Clamping Voltage vs. Peak Pulse Current



Package Dimensions



Dim	millimeters	
	min	max
A	2.70	3.10
B	1.20	1.40
C	0.89	1.11
D	0.37	0.50
E	1.78	2.04
F	0.45	0.60
G	0.89	1.02
H	0.013	0.100
I	2.10	2.50
J	0.085	0.177
K	0°	10°
L	0.45	0.60
M	0.95	
N	2.00	
O	0.85	