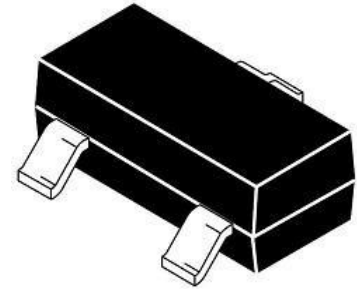


## APPLICATIONS

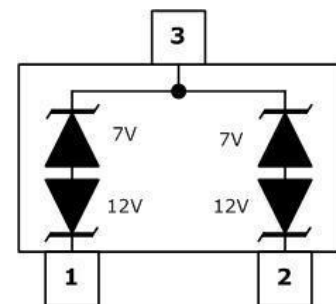
- Protection of RS-485 transceivers with extended common-mode range.
- Security systems.
- Automatic Teller Machines.
- HFC systems.
- Networks.



SOT-23

## MECHANICAL CHARACTERISTICS

- JEDEC SOT-23 Package.
- Molding Compound Flame mability Rating: UL 94V-O.
- Weight 8.0 Milligrams (Approximate).
- Quantity Per Reel: 3000pcs.
- Reel Size: 7inch.
- Lead Finish: Lead Free.



PIN CONFIGURATION

## IEC COMPATIBILITY

- IEC61000-4-2(ESD)  $\pm 15KV$ (air),  $\pm 8KV$ (contact).
- IEC61000-4-4(EFT) 40A (5/50 $\mu$ s).
- IEC61000-4-5(Lightning) 12A (8/20 $\mu$ s).

## FEATURES

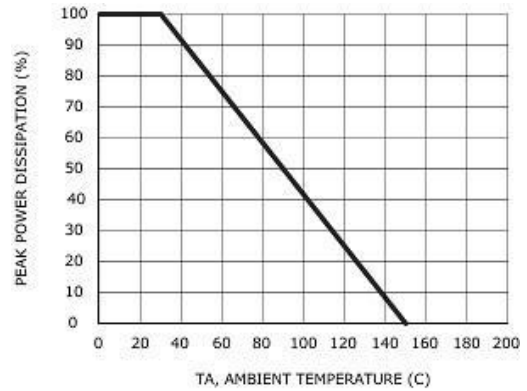
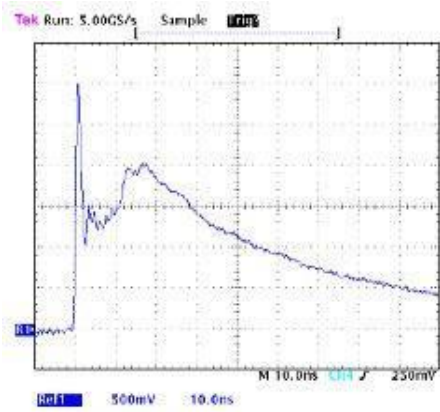
- 400 Watts Peak Pulse Power per Line (tp=8/20 $\mu$ s).
- Protect two +12V to -7V lines.
- Low clamping voltage.
- RoHS Compliant.

## DEVICE CHARACTERISTICS

MAXIMUM RATINGS (@25°C Unless Otherwise Specified)			
PARAMETER	SYMBOL	VALUE	UNITS
Peak Pulse Power (tp=8/20 $\mu$ s waveform)	P <sub>PP</sub>	400	Watts
Lead Soldering Temperature	T <sub>L</sub>	260(10sec)	°C
Operating Temperature Range	T <sub>J</sub>	-55 to + 150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to + 150	°C

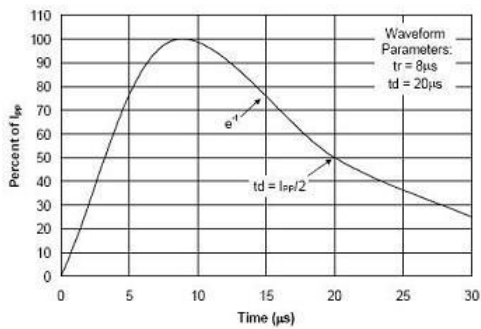
**ELECTRICAL CHARACTERISTICS PER LINE (@25°C Unless Otherwise Specified)**

PART NUMBER	DEVICE MARKING	VRWM (V) (max.)	VB (V) (min.)	IT (mA)	VC @5A (max.)	VC (max.)(@A)		IR (μA) (max.)	CT (pF) (typ)	
SM712	712	Pin 3 to Pin 1/ Pin2	7	7.5	1	10	12	17	10	55
		Pin 1/ Pin2 to Pin3	12	13.3	1	20	26	17	1	55

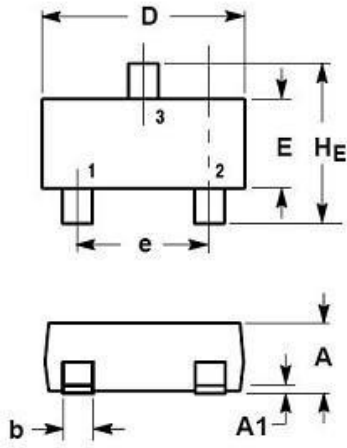


Power Derating Curve

**Pulse Waveform**

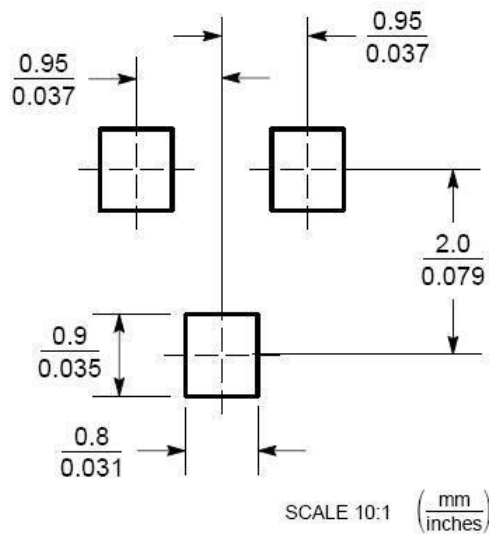


**SOT-23 PACKAGE OUTLINE & DIMENSIONS**



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.89	1.00	1.11	0.035	0.040	0.044
A1	0.01	0.06	0.10	0.001	0.002	0.004
b	0.37	0.44	0.50	0.015	0.018	0.020
c	0.09	0.13	0.18	0.003	0.005	0.007
D	2.80	2.90	3.04	0.110	0.114	0.120
E	1.20	1.30	1.40	0.047	0.051	0.055
e	1.78	1.90	2.04	0.070	0.075	0.081
L	0.35	0.54	0.69	0.014	0.021	0.029
HE	2.10	2.40	2.64	0.083	0.094	0.104

**SOLDERING FOOTPRINT**



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [ESD Suppressors / TVS Diodes](#) category:*

*Click to view products by [SEMBO](#) manufacturer:*

Other Similar products are found below :

[60KS200C](#) [D18V0L1B2LP-7B](#) [D5V0F4U5P5-7](#) [DESD5V0U1BB-7](#) [NTE4902](#) [P4KE27CA](#) [P6KE11CA](#) [P6KE39CA-TP](#) [P6KE8.2A](#)  
[SA110CA](#) [SA60CA](#) [SA64CA](#) [SMBJ12CATR](#) [SMBJ33CATR](#) [SMBJ8.0A](#) [ESD101-B1-02ELS E6327](#) [ESD105-B1-02EL E6327](#) [ESD112-B1-02EL E6327](#) [ESD119B1W01005E6327XTSA1](#) [ESD5V0L1B02VH6327XTSA1](#) [ESD7451N2T5G](#) [19180-510](#) [CPDT-5V0USP-HF](#)  
[3.0SMCJ33CA-F](#) [3.0SMCJ36A-F](#) [HSPC16701B02TP](#) [D3V3Q1B2DLP3-7](#) [D55V0M1B2WS-7](#) [DESD5V0U1BL-7B](#) [DRTR5V0U4SL-7](#)  
[SCM1293A-04SO](#) [ESD200-B1-CSP0201 E6327](#) [SM12-7](#) [SMLJ45CA-TP](#) [CEN955 W/DATA](#) [82350120560](#) [VESD12A1A-HD1-GS08](#)  
[CPDUR5V0R-HF](#) [CPDQC5V0U-HF](#) [CPDQC5V0USP-HF](#) [CPDQC5V0-HF](#) [D1213A-01LP4-7B](#) [D1213A-02WL-7](#) [MMAD1108/TR13](#)  
[5KP100A](#) [5KP15A](#) [5KP18A](#) [5KP48A](#) [5KP90A](#) [5KP90CA](#)