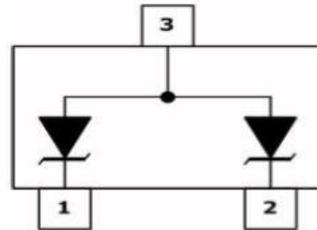
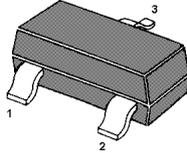


ESD Protection Diode

SOT-23



MARKING : 12C

**FEATURES**

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- 2 Unidirectional transil functions
- Low leakage current:IR max< 20  $\mu$ A at VRM
- 150W peak pulse power(8/20 $\mu$ s)
- Transient protection for data lines as per IEC61000-4-2(ESD) 15KV(air) 15KV(contact) IEC61000-4-5(Lightning) see IPPM below

**APPLICATIONS**

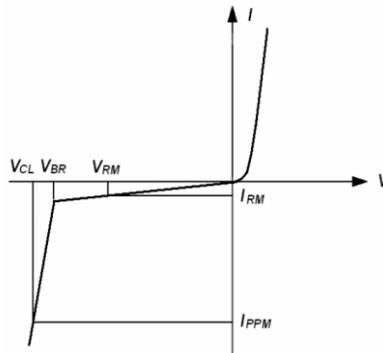
- Computers
- Printers
- Communication systems

**ABSOLUTE RATINGS(Ta = 25° C)**

Parameter	Symbol	Limits	Unit
Peak Pulse Power (tp = 8/20 $\mu$ s)	PPP	300	W
Lead Solder Temperature – Maximum (10 Second Duration)	TL	260	°C
Storage Temperature Range	Tstg	-55 ~ +150	°C
Operating Temperature Range	Top	-40 ~ +125	°C
Maximum junction temperature	Tj	150	°C
Electrostatic discharge	ESD		kV
IEC61000-4-2 air discharge		$\pm$ 30	
IEC61000-4-2 contact discharge		$\pm$ 30	

### ELECTRICAL CHARACTERISTICS (Ta=25°C)

Symbol	Parameter
VRM	Stand-off voltage
VBR	Breakdown voltage
VCL	Clamping voltage
IRM	Leakage current
IPPM	Peak pulse current



DEVICE	VRWM (V)	IR (μA) @VRWM	VBR (V) @IT (Note 1)	IT (mA)	VC (V) @IPP=1A	VC (V) @IPP=4A	IPP(A) @tp=8/20μs	C (pF) f=1MHz
	Max.	Max.	Min.		Max.	Max.	Max.	Max.
GSOT12C	12	0.5	13.3	1	19	37	4	50

1. 8/20 waveform used.

ELECTRICAL CHARACTERISTICS CURVE

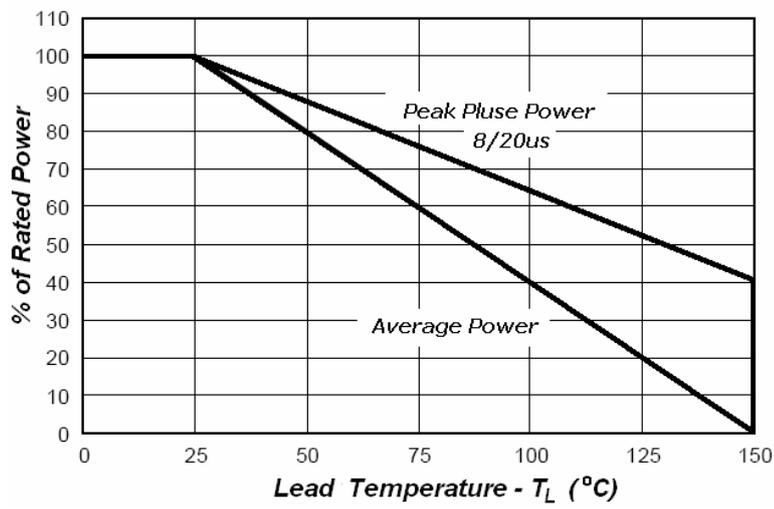
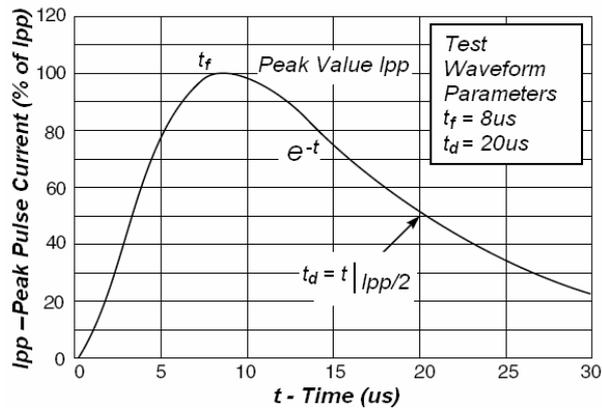
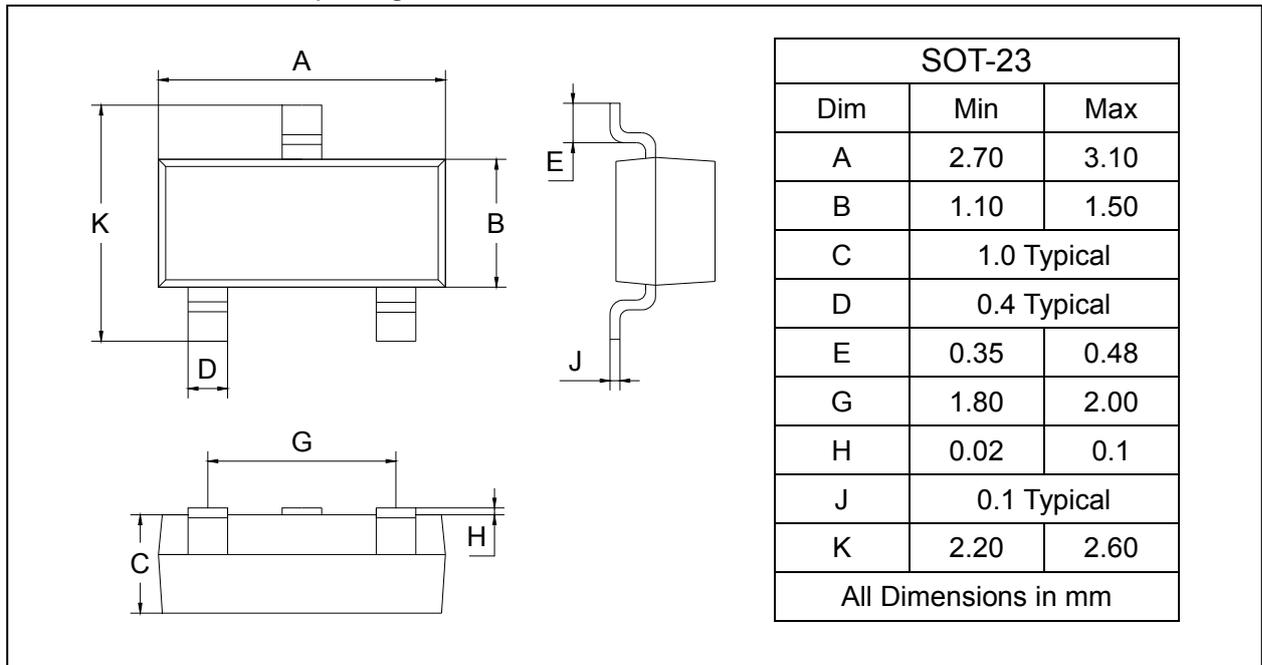


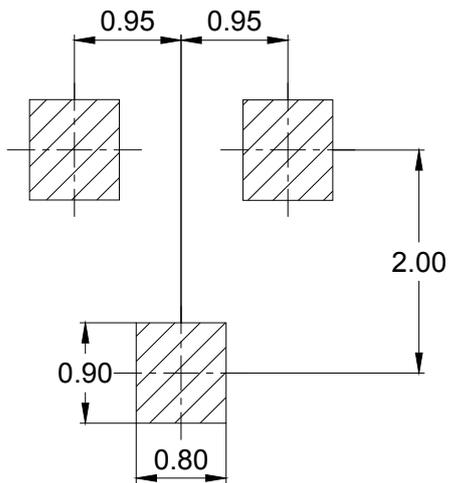
Fig3.Power Derating

Plastic surface mounted package

SOT-23



SOLDERING FOOTPRINT



Unit : mm