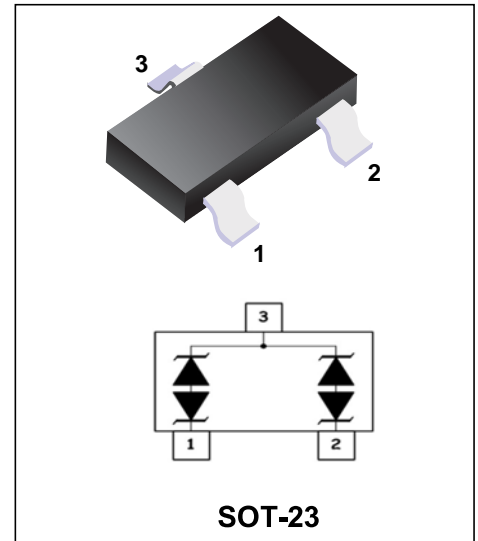


Plastic Encapsulate ESD Protection Diodes

Features

- 350 Watts Peak Pulse Power per (8/20μs)
- IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)
- IEC61000-4-4 (EFT) 40A (5/50ns)
- Protects two bidirectional line
- Low clamping voltage
- Low leakage current
- Working voltages : 3V, 5V, 8V, 12V, 15V, 18V, 20V, 24V, 36V
- Meets MSL 1 Requirements



Mechanical characteristics

- Package: SOT-23
- Flammability Rating: UL 94V-0
- Terminal: Matte tin plated.
- High temperature soldering guaranteed: 260°C /10s
- Packaging: Tape and Reel

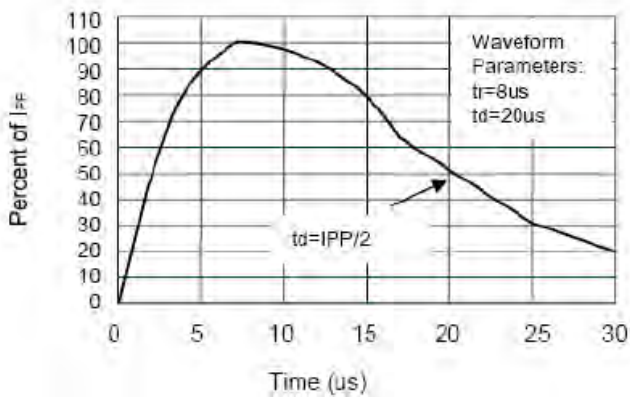
Absolute maximum ratings (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
ESD per IEC 61000-4-2 (Air)	VESD	± 15	KV
ESD per IEC 61000-4-2 (Contact)		± 8	
Peak Pulse Power(tp=8/20us waveform)	PPP	350	W
Operating Temperature	T _{OPT}	-55 to +150	°C
Storage Temperature	T _{STG}	-55 to +150	°C
Lead Solder Temperature – Maximum (10 Second Duration)	T _L	260(10 sec.)	°C

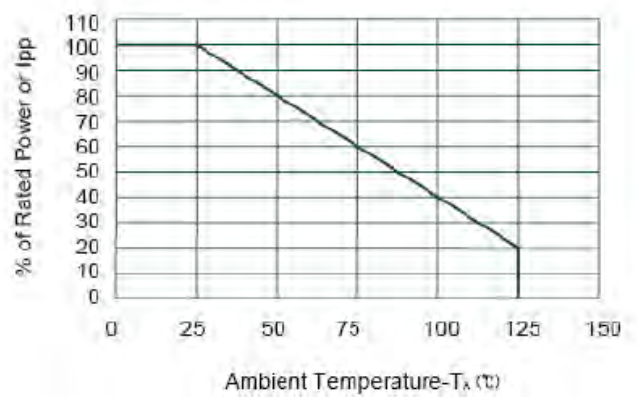
Electrical Characteristics(TA = 25 °C unless otherwise specified)

PART NUMBER	V _{RWM} (V) (max.)	V _B (V) (min.)	I _T (mA)	V _{C@1A} (V) (max.)	V _C (V)		I _R (μA) (max.)	C _T (pF) (max.)
					(max.)	(@A)		
SM03C	3.3	4	1	7.5	13	20	40	450
SM05C	5	6	1	9.8	18	17	10	200
SM08C	8	8.5	1	13.4	24	15	2	120
SM12C	12	13.3	1	19	32	11	1	75
SM15C	15	16.7	1	24	38	10	1	68
SM18C	18	20.0	1	29	45	9	1	57
SM20C	20	22.3	1	35	50	8	1	52
SM24C	24	26.7	1	43	52	7	1	50
SM36C	36	40	1	60	75	4.5	1	35

Electrical Characteristics Curve



Pulse Waveform



Power Derating Curve

Ordering information

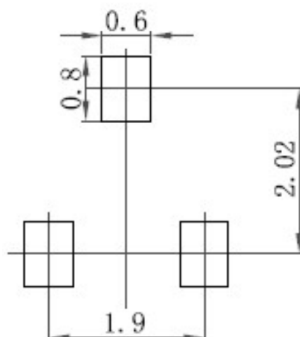
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel, 7" reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-23

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



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