

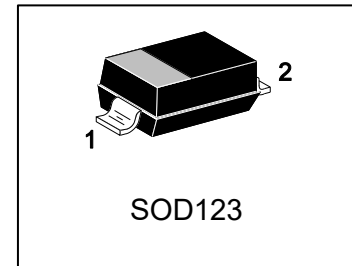
MSD103B

S-MSD103B

SCHOTTKY BARRIER SWITCHING DIODE

1. FEATURES

- Low Forward Voltage Drop.
- Guard Ring Construction for Transient Protection.
- Negligible Reverse Recovery Time
- Low Reverse Capacitance
- Also Available in Lead Free Version
- 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. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
MSD103B	S5	3000/Tape&Reel

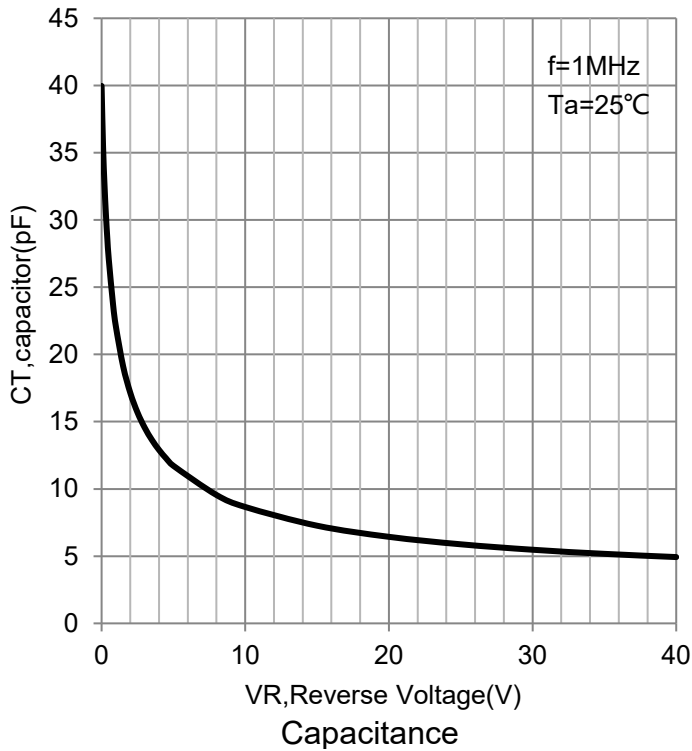
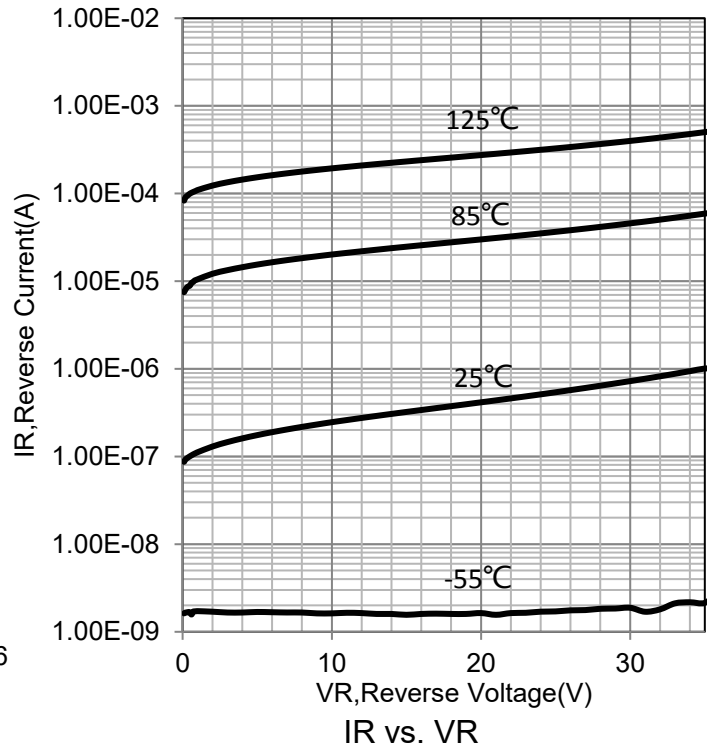
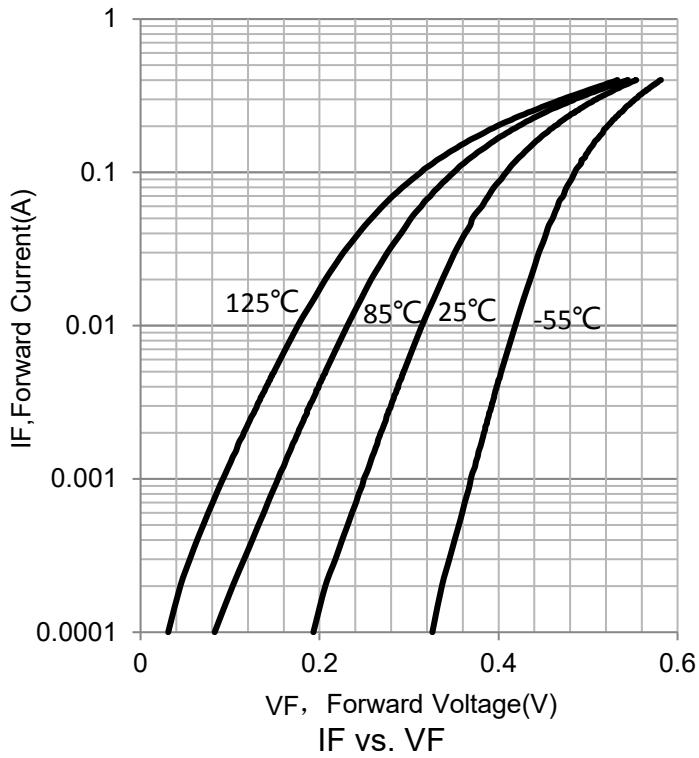
3. MAXIMUM RATINGS(Ta = 25°C)

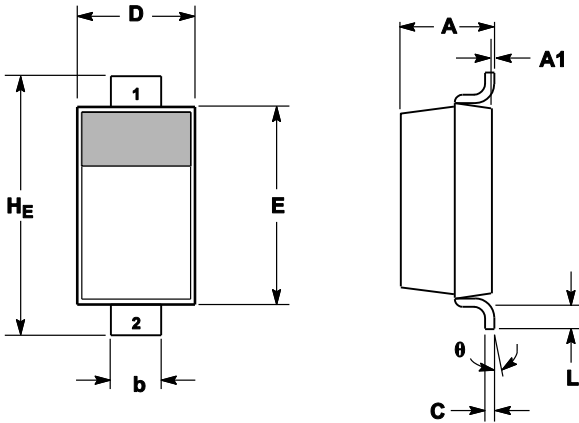
Parameter	Symbol	Limits	Unit
Peak Repetitive Reverse Voltage	VRRM	30	V
Working Peak Reverse Voltage	VRWM	30	V
DC Blocking Voltage	VR	30	V
RMS Reverse Voltage	VR(RMS)	21	V
Forward Continuous Current	IFM	350	mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s	IFSM	1.5	A
Power Dissipation	PD	400	mW
Thermal Resistance, Junction to Ambient Air	RθJA	300	°C/W
Operating and Storage Temperature Range	Tj, Tstg	-65~+125	°C

4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min	Typ.	Max	Unit
Reverse Breakdown Voltage (IR = 100μA)	V(BR)R	30	-	-	V
Forward Voltage Drop (IF = 20mA) (IF = 200mA)	VFM	-	-	0.37 0.6	V
Peak Reverse Current (VR = 20V)	IRM	-	-	5	μA
Total Capacitance (VR = 0V, f = 1.0MHz)	CT	-	40	-	pF
Reverse Recovery Time (IF = IR = 200mA, Irr = 0.1 x IR, RL = 100Ω)	trr	-	10	-	nS

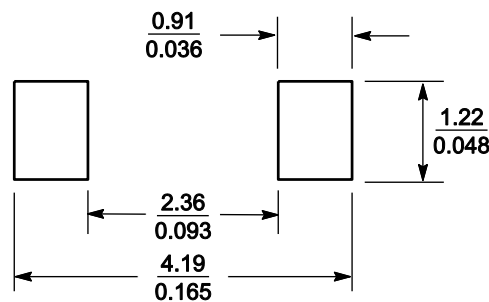


5.ELECTRICAL CHARACTERISTICS CURVES


6.OUTLINE AND DIMENSIONS

Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.94	1.17	1.35	0.037	0.046	0.053
A1	0.00	0.05	0.10	0.000	0.002	0.004
b	0.51	0.61	0.71	0.020	0.024	0.028
c	---	---	0.15	---	---	0.006
D	1.40	1.60	1.80	0.055	0.063	0.071
E	2.54	2.69	2.84	0.100	0.106	0.112
HE	3.56	3.68	3.86	0.140	0.145	0.152
L	0.25	---	---	0.010	---	---
theta	0°	---	10°	0°	---	10°

7.SOLDERING FOOTPRINT


SCALE 10:1 (mm/inches)

