

SCHOTTKY BARRIER SWITCHING DIODE

Features

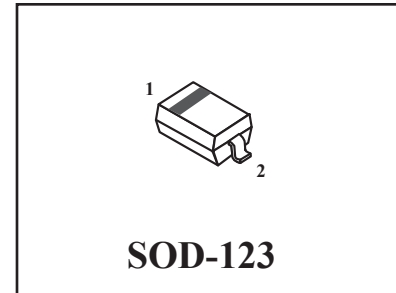
- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Negligible Reverse Recovery Time
- Low Reverse Capacitance
- Also Available in Lead Free Version
- S- Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q101 Qualified and PPAP Capable.

Mechanical Data

- Case: SOD-123, Plastic
- Case material - UL Flammability Rating Classification 94V-0
- Moisture sensitivity: Level 1 per J-STD-020A
- Polarity: Cathode Band
- Leads: Solderable per MIL-STD-202, Method 208
- Also Available in Lead Free Plating (Matte Tin Finish). Please See Ordering Information, Note 4, on Page 2
- Marking: Type Code only or Date Code and Type Code
- Type Codes:

LMSD103AT1G	S4
LMSD103BT1G	S5
LMSD103CT1G	S6
- Weight: 0.01 grams (approx.)

LMSD103*T1G
S-LMSD103*T1G



Equivalent Circuit Diagram



Maximum Ratings @ T_A = 25°C unless otherwise specified

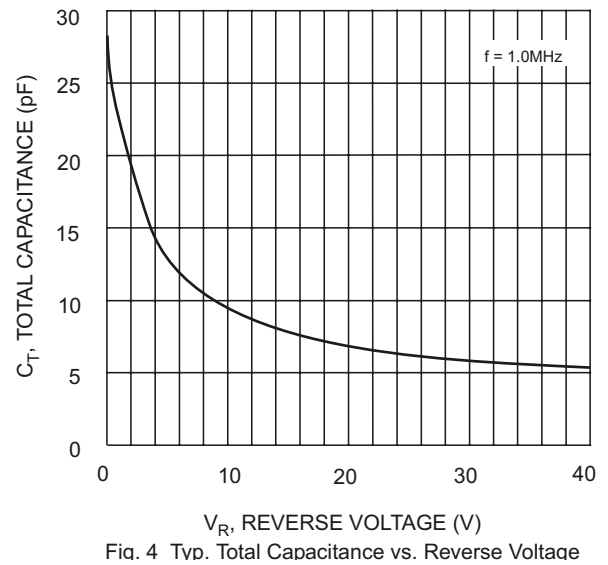
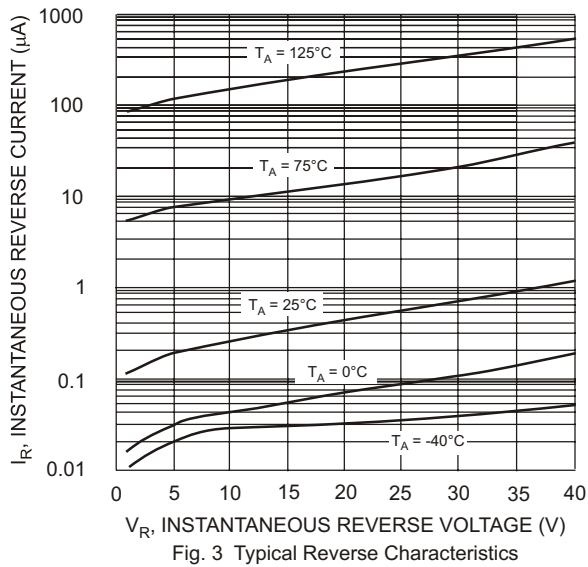
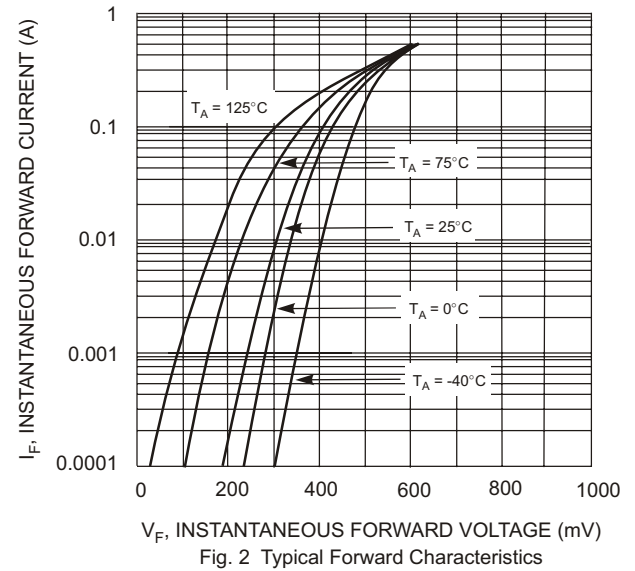
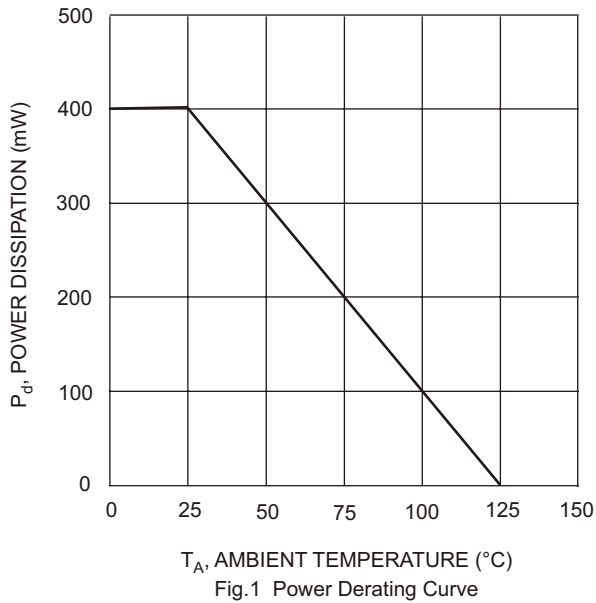
Characteristic	Symbol	LMSD103AT1G	LMSD103BT1G	LMSD103CT1G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	30	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	21	14	V
Forward Continuous Current (Note 1)	I_{FM}	350			mA
Non-Repetitive Peak Forward Surge Current @ t ≤ 1.0s	I_{FSM}	1.5			A
Power Dissipation (Note 1)	P_d	400			mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	300			°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +125			°C

Electrical Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	40 30 20	—	—	V	$I_R = 100\mu A$
Forward Voltage Drop (Note 2)	V_{FM}	—	—	0.37 0.60	V	$I_F = 20mA$ $I_F = 200mA$
Peak Reverse Current (Note 2)	I_{RM}	—	—	5.0	μA	$V_R = 30V$ $V_R = 20V$ $V_R = 10V$
Total Capacitance	C_T	—	28	—	pF	$V_R = 0V, f = 1.0MHz$
Reverse Recovery Time	t_{rr}	—	10	—	ns	$I_F = I_R = 200mA$, $I_{rr} = 0.1 \times I_R, R_L = 100\Omega$

- Notes: 1. Part mounted on FR-4 board with recommended pad layout, which can be found on our website
2. Short duration test pulse used to minimize self-heating effect.

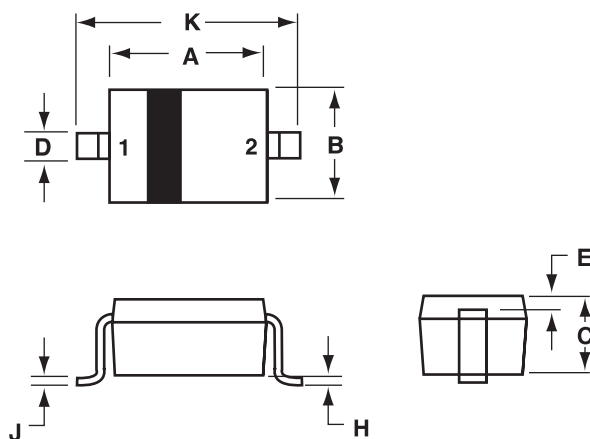
LMSD103*T1G , S-LMSD103*T1G



LMSD103*T1G , S-LMSD103*T1G

SOD-123 Outline Dimensions

Unit:mm



SOD-123		
Dim	Min	Max
A	2.55	2.85
B	1.40	1.80
C	0.95	1.35
D	0.50	0.70
E	0.30 REF	
H	-	0.10
J	-	0.15
K	3.55	3.85

PIN 1. CATHODE
2. ANODE