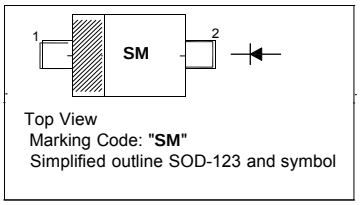
Surface Mount Schottky Barrier Diode

Features

- Low forward voltage
- Low reverse capacitance

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "**SM**"
Simplified outline SOD-123 and symbol

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	60	V
Working Peak Reverse Voltage	V_{RWM}	60	V
DC Blocking Voltage	V_R	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	42	V
Average Rectified Forward Current	$I_{F(AV)}$	15	mA
Non-Repetitive Peak Forward Surge Current at t = 1 s at t = 10 µs	I_{FSM}	50 2	mA A
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	300	°C /W
Power Dissipation	P_{tot}	333	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_{stg}	- 55 to + 150	°C

Characteristics at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 10 µA	$V_{(BR)R}$	60	-	V
Forward Voltage at I_F = 1 mA at I_F = 15 mA	V_F	- -	0.41 1	V
Reverse Current at V_R = 50 V	I_R	-	200	nA
Total Capacitance at V_R = 0 V, f = 1 MHz	C_{tot}	-	2.2	pF
Reverse Recovery Time at $I_F = I_R$ = 5 mA , I_{rr} = 0.1X I_R, R_L = 100 Ω	t_{rr}	-	1	ns

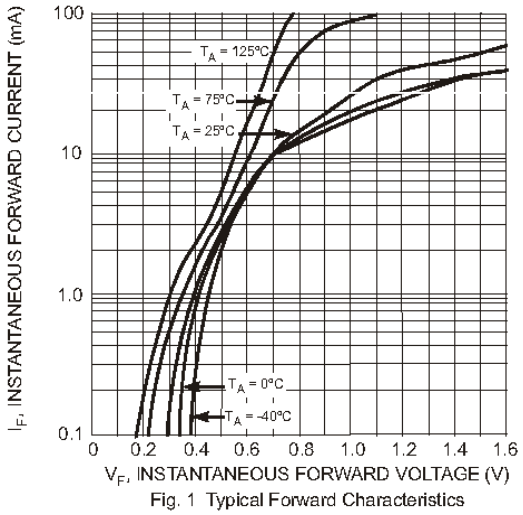


Fig. 1 Typical Forward Characteristics

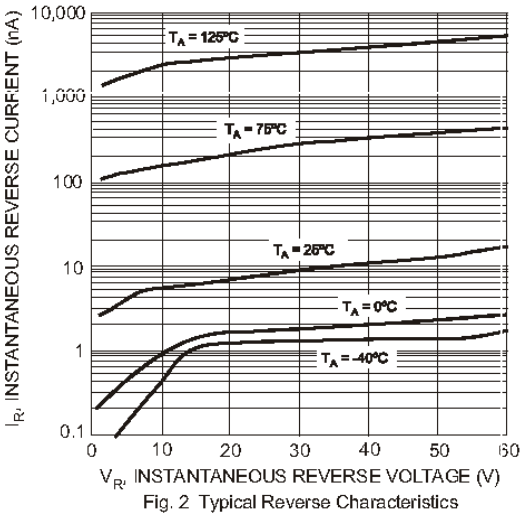


Fig. 2 Typical Reverse Characteristics