Switching Diodes

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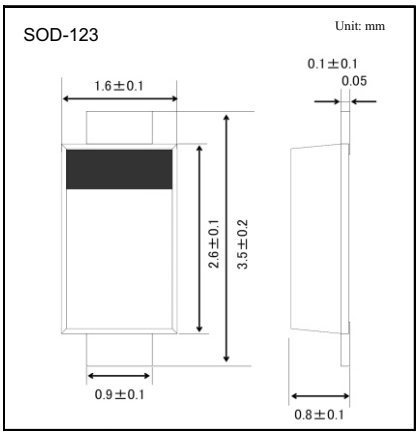

■ Features

- Low Forward Voltage Drop
- Low Leakage Current
- Superior Reverse Avalanche Capability
- Excellent High Temperature Stability
- Soft, Fast Switching Capability
- ±16KV ESD Protection

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{RM}	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	
Average Rectified Output Current	I_O	2	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I_{FSM}	50	A
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	180	℃/W
Junction Temperature	T_J	150	℃
Storage temperature range	T_{STG}	-65 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	I_R= 100uA	40			V
Forward voltage	V_F	I_F=100mA, T_J=25℃		0.265	0.315	
		I_F=1000mA, T_J=25℃		0.38	0.43	
		I_F=2000mA, T_J=25℃		0.45	0.50	
		I_F=100mA, T_J=125℃		0.17	0.22	
		I_F=1000mA, T_J=125℃		0.325	0.375	
		I_F=2000mA, T_J=125℃		0.42	0.47	
Reverse voltage leakage current	I_R	V_R=5V ,TJ=25℃		8	40	uA
		V_R=40V ,TJ=25℃		16	100	
		V_R=5V ,TJ=125℃		1.3	8	mA
		V_R=40V ,TJ=125℃		2.1	10	

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■ Typical Characteristics

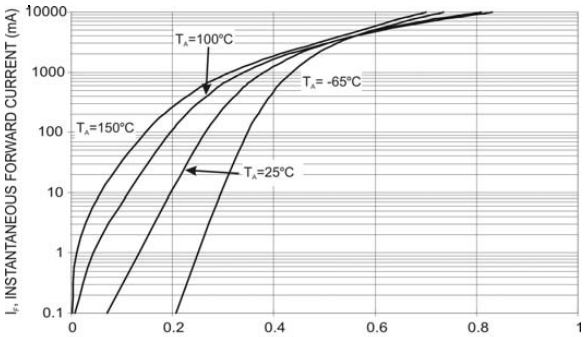

Fig.1 Typical Forward Characteristics

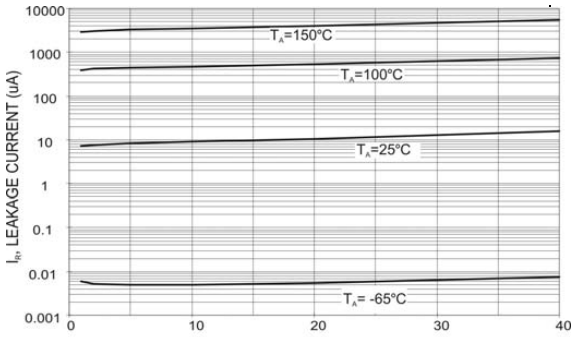

Fig. 2 Typical Reverse Characteristics

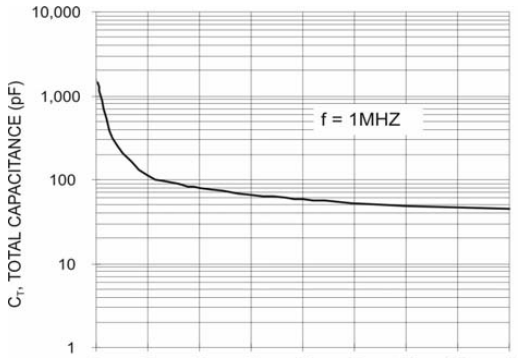

Fig. 3: Typical Total Capacitance

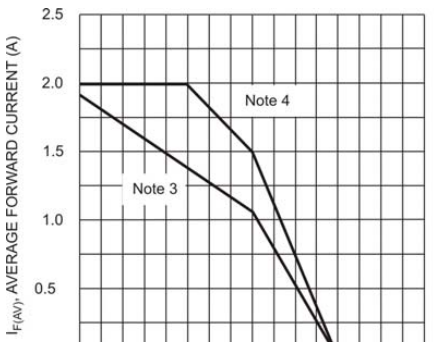

Fig. 4 Forward Current Derating Curve

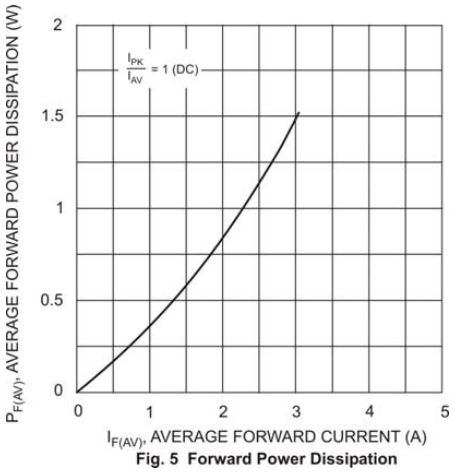

Fig. 5 Forward Power Dissipation

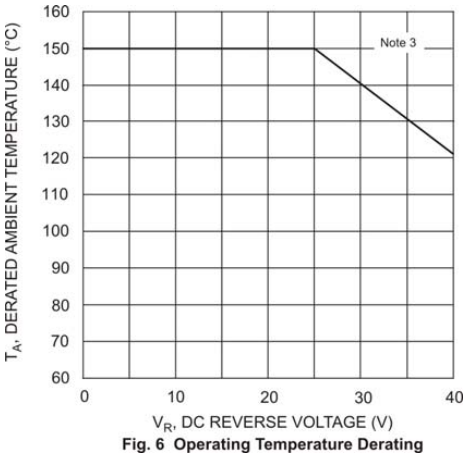

Fig. 6 Operating Temperature Derating