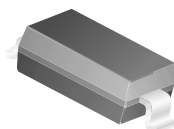


MMSD3070

Small Signal Diode



SOD123
COLOR BAND DENOTES CATHODE
TOP MARKING: 33

Absolute Maximum Ratings * $T_a = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{RRM}	Maximum Repetitive Reverse Voltage	200	V
$I_{F(AV)}$	Average Rectified Forward Current	200	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current		
	Pulse Width = 1.0 second	1.0	A
	Pulse Width = 1.0 microsecond	2.0	A
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	150	$^\circ\text{C}$

* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics

Symbol	Parameter	Value	Units
P_D	Power Dissipation	400	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	312	$^\circ\text{C}/\text{W}$

Electrical Characteristics $T_a = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Conditions	Min.	Max.	Units
V_R	Breakdown Voltage	$I_R = 100\mu\text{A}$	200		V
V_F	Forward Voltage	$I_F = 100\text{mA}$		1.0	V
I_R	Reverse Leakage	$V_R = 175\text{V}$		100	nA
		$V_R = 175\text{V}, T_A = 150^\circ\text{C}$		100	μA
C_T	Total Capacitance	$V_R = 0, f = 1.0\text{MHz}$		5.0	pF
t_{rr}	Reverse Recovery Time	$I_F = I_R = 30\text{mA},$ $I_{RR} = 1.0\text{mA}, R_L = 100\Omega$		50	ns

Typical Performance Characteristics

Figure 1. Forward Voltage vs Forward Current

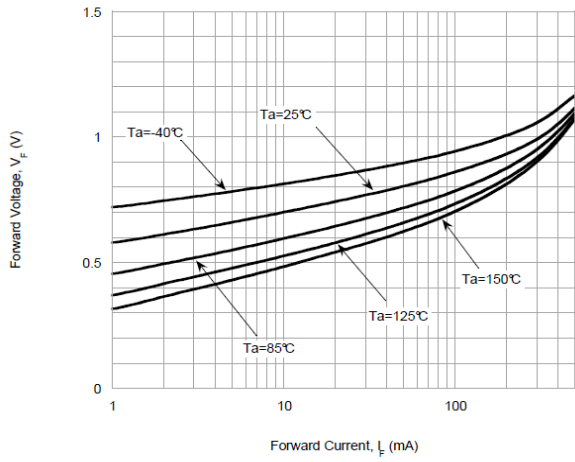


Figure 2. Reverse Current vs Reverse Voltage

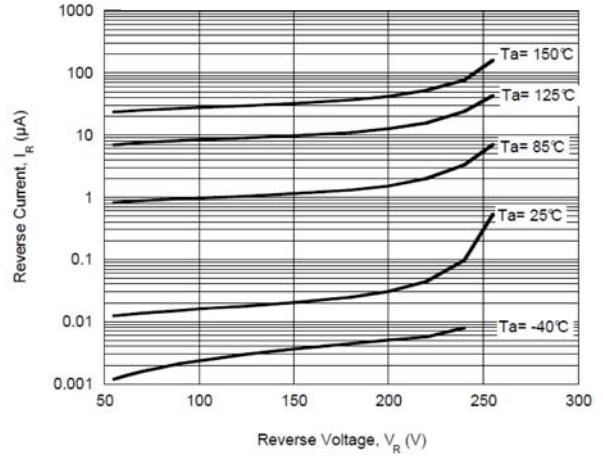
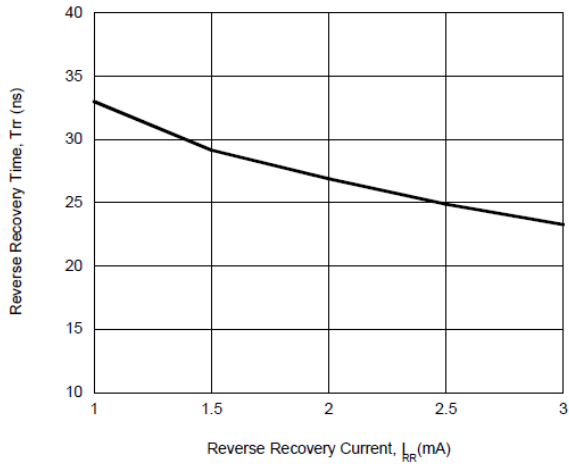


Figure 3. Reverse Recovery Time vs Reverse Recovery Current





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