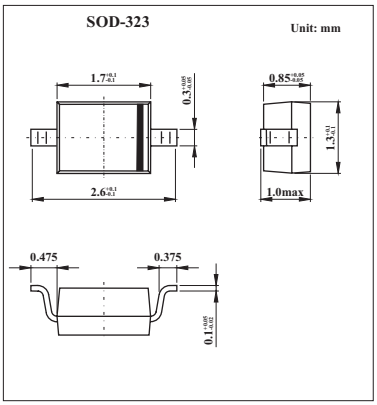
FAST SWITCHING DIODES



■ Features

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Non-repetitive peak reverse voltage	V_{RM}	100	V
Peak repetitive reverse voltage Working peak reverse voltage DC blocking voltage	V_{RRM} V_{RWM} V_R	75	V
RMS reverse voltage	$V_{R(RMS)}$	53	V
Average rectified output current	I_O	150	mA
Forward continuous current	I_{FM}	300	mA
Non-repetitive peak forward surge current@ t = 1.0s @ t = 1.0 us	I_{FSM}	1.0 2.0	A
Power dissipation *	P_D	350	mW
Typical thermal resistance, junction to ambient air*	$R_{\theta JA}$	625	K/W
Operating and storage temperature range	T_j,T_{stg}	-65 to +150	℃

* Part mounted on FR-4 PC board with recommended pad layout,

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	I_R = 1.0 μ A	75			V
Forwarad voltage	V_{FM}	I_F = 10mA			0.715	V
		I_F = 10mA			0.855	
		I_F = 50mA			1.0	
		I_F = 150mA			1.25	
Peak reverse current	I_{RM}	V_R = 75V			1.0	μ A
		V_R = 75V, Tj = 150℃			50	
		V_R = 25V, Tj = 150℃			30	
		V_R = 20V			25	nA
Capacitance	C_T	V_R = 0, f = 1.0MHz			2.0	pF
Reverse recovery time	t_{rr}	I_F = I_R =10mA,Irr = 0.1 × I_R, R_L = 100 Ω			4.0	ns

■ Typical Characteristics

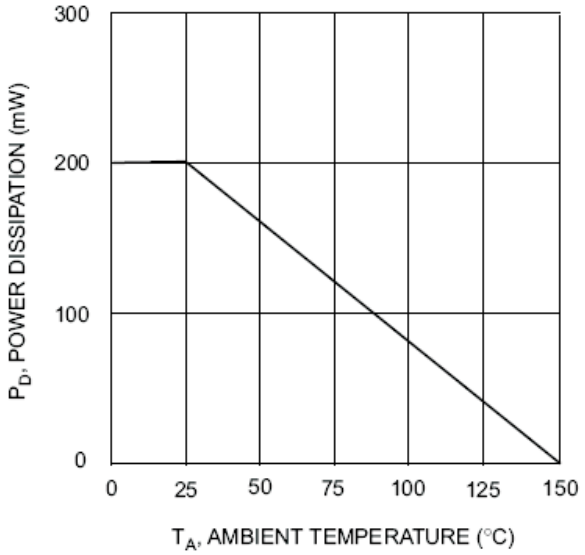


Fig.1 Power Derating Curve

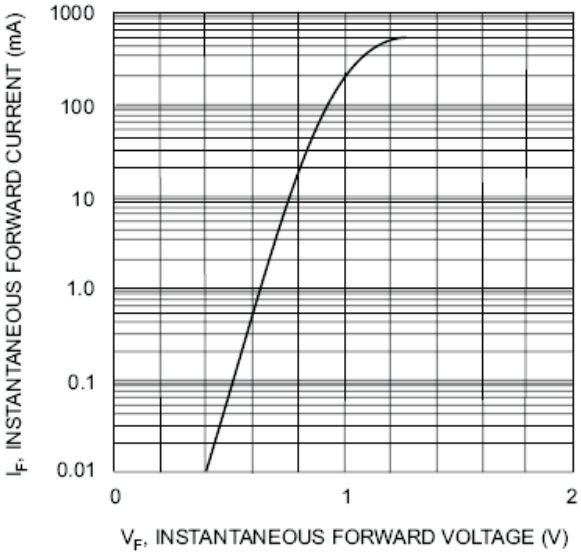


Fig.2 Forward Characteristics

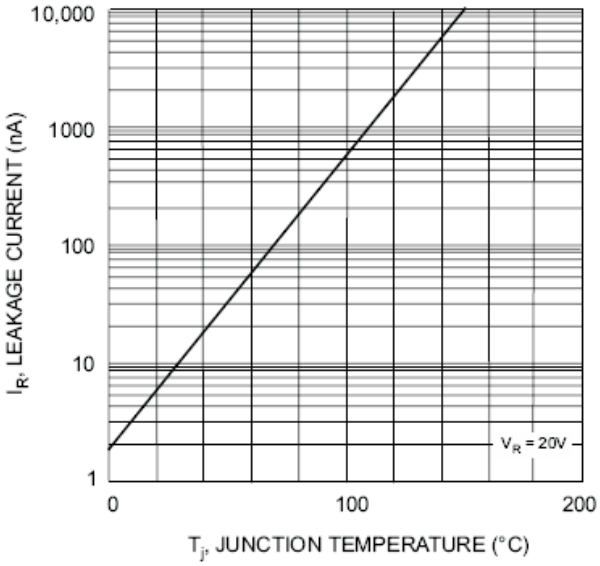


Fig. 3 Leakage Current vs Junction Temperature