

SOT23 SILICON PLANAR HIGH SPEED SWITCHING DIODE

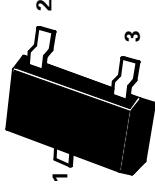
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FMMD914

DIODE PIN CONNECTION



PARTMARKING DETAIL - 5D



SOT23

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Working Peak Reverse Voltage	V_{RWM}	75	V
Average Rectified Forward Current at $T_{amb}=25^{\circ}\text{C}$	$I_{F(AV)}$	75	mA
Repetitive Peak Forward Current	I_{FRM}	225	mA
Power Dissipation at $T_{amb} = 25^{\circ}\text{C}$	P_{tot}	330	mW
Operating and Storage Temperature Range	$T_j; T_{stg}$	-55 to +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^{\circ}\text{C}$ unless otherwise stated).

PARAMETER	SYMBOL	MIN.	MAX.	UNIT	CONDITIONS.
Reverse Breakdown Voltage	V_{BR}	75		V	$I_R = 100\mu\text{A}$
Forward Voltage	V_F		1	V	$I_F = 10\text{mA}$
Static Reverse Current	I_R		25 50	nA μA	$V_R = 20\text{V}$ $V_R = 20\text{V}, T_{amb} = 150^{\circ}\text{C}$
Reverse Recovery Time	t_{rr}		8	ns	$I_F = I_{RM}, I_{RR} = 1\text{mA}$ $R_L = 100\Omega$
			4	ns	$I_F = 10\text{mA}, I_{RR} = 1\text{mA}, V_R = 6\text{V}$ $R_L = 100\Omega$
Total Capacitance	C_T		4	pF	$V_R = 0, f = 1\text{MHz}$
Forward Recovery Voltage	$V_{FM(REC)}$		2.5	V	$I_F = 50\text{mA}, R_L = 50\Omega$
Rectification Efficiency	η_r	45		%	$V_R = 2\text{V}, R_L = 5k\Omega, C_L = 20\text{pF}$ $Z_{source} = 50\Omega, f = 100\text{MHz}$

Spice parameter data is available upon request for this device