



Fast Speed switching Diode

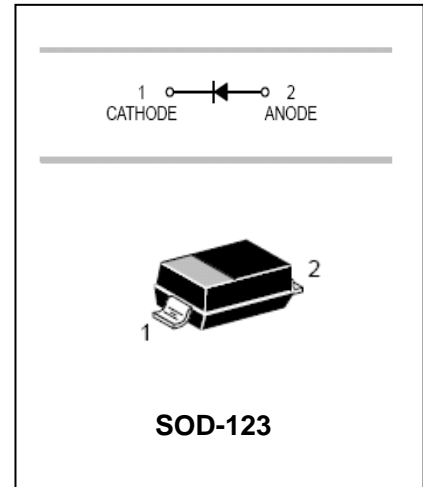
MMSD4148

FEATURES

- SOD-123 surface mount package.
- High breakdown voltage.
- Fast speed switching time.



Lead-free



APPLICATIONS

- Surface mount fast switching diode

ORDERING INFORMATION

Type No.	Marking	Package Code
MMSD4148	5I	SOD-123

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Maximum repetitive reverse Voltage	V_{RRM}	100	V
Average rectified forward current	$I_{F(AV)}$	200	mA
Non-repetitive Peak Forward Surge Current	I_{FSM}	1.0	A
@t=1s		2.0	
Power Dissipation	P_d	400	mW
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	312	°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to+150	°C

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Characteristic	Symbol	Min	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	100	-	V	$I_R=100\mu A$
Forward Voltage	V_F	-	1.0	V	$I_F=10mA$
Reverse Current	I_R	-	25 5.0	nA uA	$V_R=20V$ $V_R=75V$
Diode Capacitance	C_D	-	4.0	pF	$V_R=0, f=1.0MHz$
Reverse Recovery Time	t_{rr}	-	4.0	ns	$I_F=I_R=10mA$

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TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

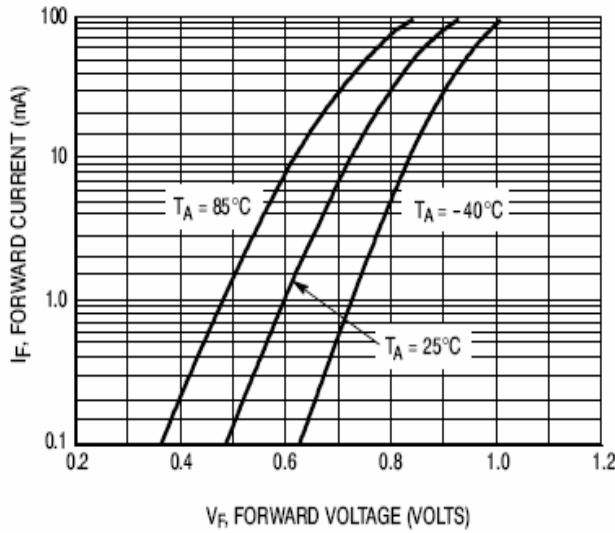


Figure 1. Forward Voltage

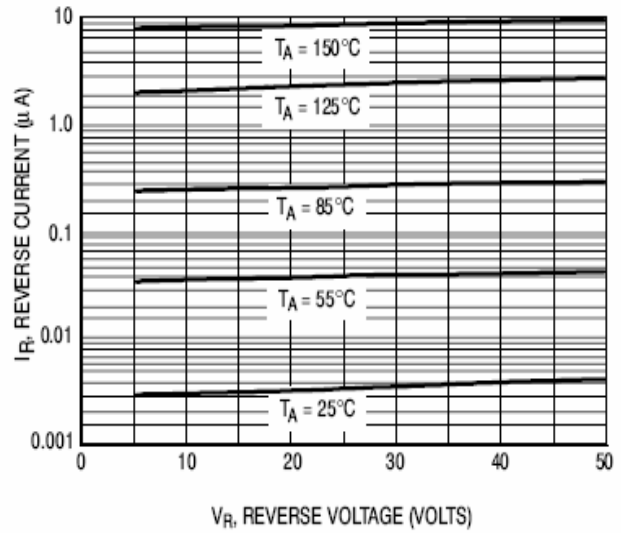


Figure 2. Leakage Current

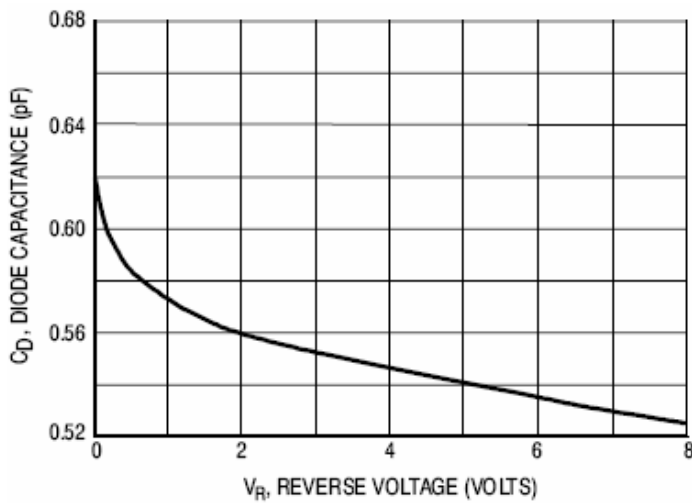


Figure 3. Capacitance



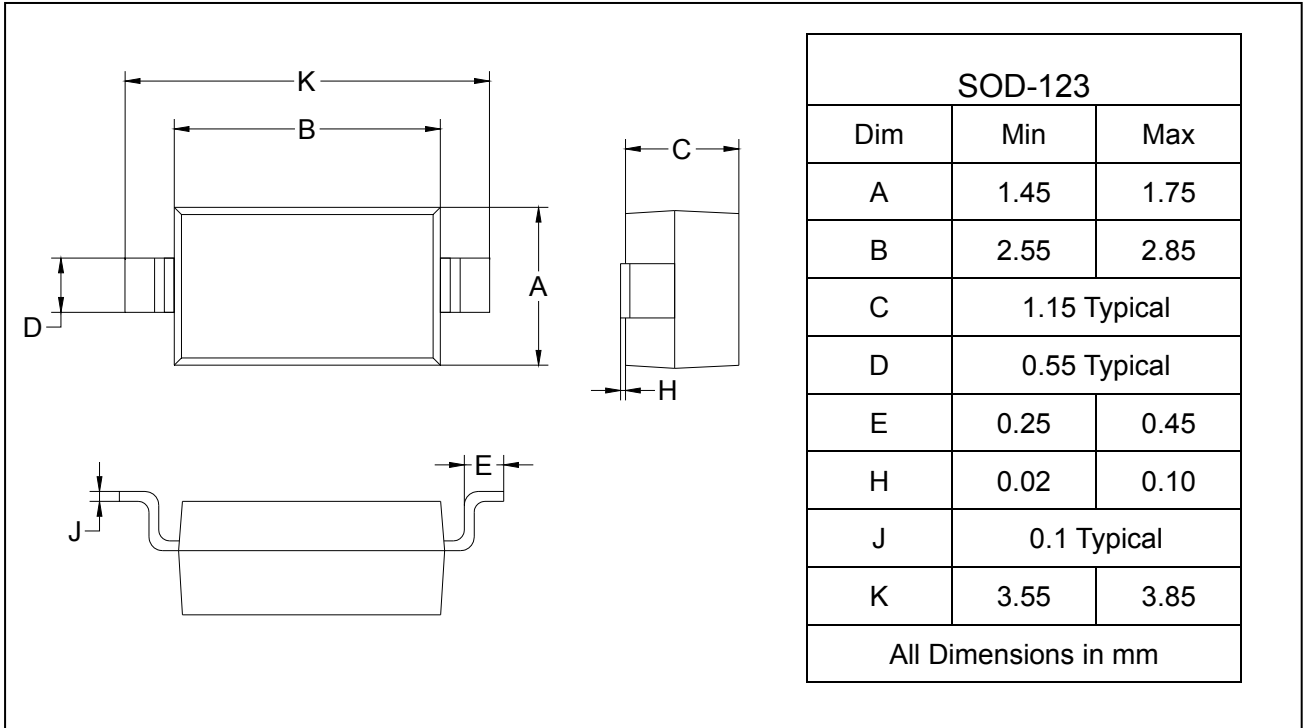
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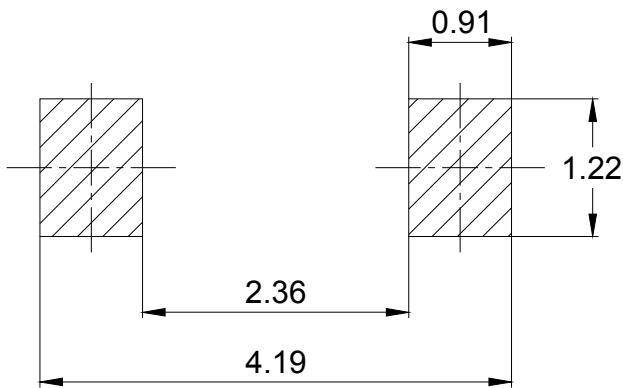
PACKAGE OUTLINE

Plastic surface mounted package

SOD-123



SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
MMSD4148	SOD-123	3000/Tape&Reel