



MM4148

SURFACE MOUNT SWITCHING DIODE

REVERSE VOLTAGE: 75V

FORWARD CURRENT: 150mA

TECHNICAL SPECIFICATION

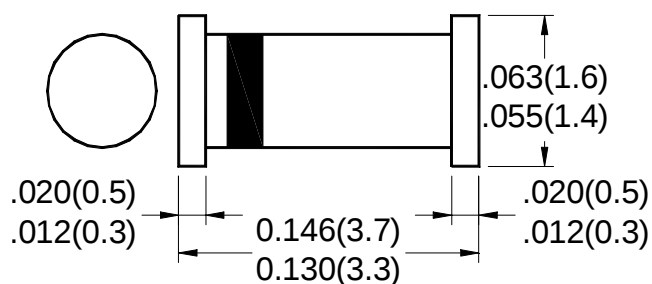
FEATURES

- Ideal for surface mount pick and place application
- Small glass structure ensures high reliability
- Fast switching
- Low leakage
- High temperature soldering guaranteed:
250°C/10S/9.5mm lead length at 5 lbs tension

MECHANICAL DATA

- Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
- Case: Glass, hermetically sealed
- Polarity: Color band denotes cathode
- Mounting position: Any

MINI MELF



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified)

RATINGS	SYMBOL	VALUE	UNITS
Reverse Voltage	V_R	75	V
Peak Reverse Voltage	V_{RM}	100	V
Forward Current (average)	I_O	150	mA
Repetitive Forward Peak Current	I_{FRM}	300	mA
Power Dissipation at $T_a=25^\circ\text{C}$	P_{tot}	500	mW
Forward Voltage ($I_F=10\text{mA}$)	V_F	1	V
Reverse Current ($V_R=20\text{V}$)	I_{R1}	25	nA
Reverse Current ($V_R=75\text{V}$)		5	mA
Reverse Current ($V_R=20\text{V}, T_J=100^\circ\text{C}$)	I_{R2}	50	mA
Capacitance (note 1)	C_t	4	pF
Reverse Recovery Time (note 2)	t_{rr}	4	nS
Thermal Resistance (Junction to ambient air)	$R_{\theta(ja)}$	0.35	$^\circ\text{C}/\text{mW}$
Voltage Rise (note 3)	V_{fr}	2.5	V
Rectification Efficiency (note 4)	h_v	0.45	-
Operating Junction and Storage Temperature Range	T_{STG}, T_J	-55 ~ +175	$^\circ\text{C}$

Notes:

1. $V_R=0\text{V}$, $f=1\text{ MHz}$
2. $I_F=10\text{mA}$ to $I_R=1\text{mA}$, $V_R=6\text{V}$, $R_L=100\Omega$
3. When switching on tested with 50mA forward pulses $t_p=0.1\mu\text{s}$, Rise Time < 30ns, $f_p=5$ to 100KHz
4. $f=100\text{MHz}$, $V_{RF}=2\text{V}$