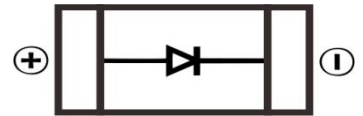


GENERAL PURPOSE RECTIFIER DIODE**FEATURES**

- Surface Mount device
- Low Reverse voltage leakage current
- Glass passivated junction
- High forward surge current capability
- Low forward voltage drop

**MELF****MECHANICAL DATA**

- Case: MELF
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Weight: 0.25 grams (approximate)

**MAXIMUM RATINGS ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)**

Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	V
DC Blocking Reverse Voltage	V_R	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	560	V
Maximum Average Forward Rectified Current	I_F	1	A
Non-Repetitive Peak Forward Surge Current @ $t@=8.3\text{ms}$	I_{FSM}	30	A
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	50	$^{\circ}\text{C/W}$
Reverse Recovery Time(@ $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$)	t_{rr}	2.5	μS
Junction Temperature	T_J	-55 ~ +150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_F			1.1	V	$I_F=1\text{A}$
Reverse current	I_R			5	μA	$V_R=1000\text{V}$
Diode capacitance	C_D		15		pF	$V_R=4V_{DC}, f=1\text{MHz}$

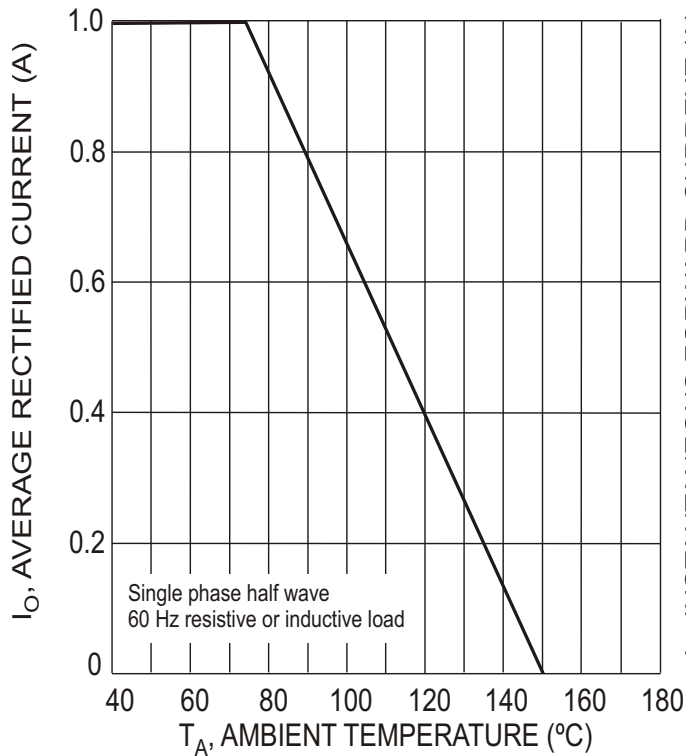
GENERAL PURPOSE RECTIFIER DIODE**Typical Characteristics**

Fig. 1 Forward Current Derating Curve

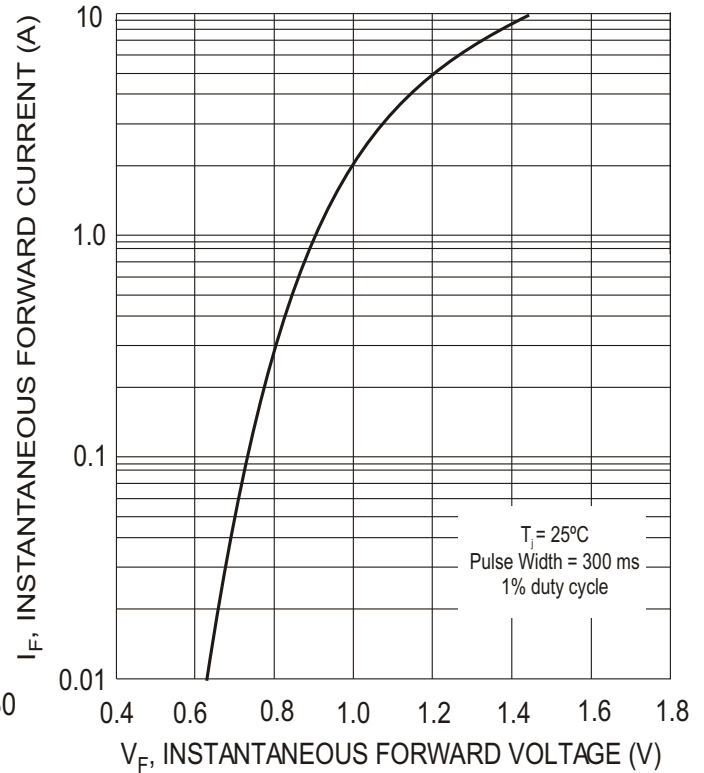


Fig. 2 Typical Forward Characteristics

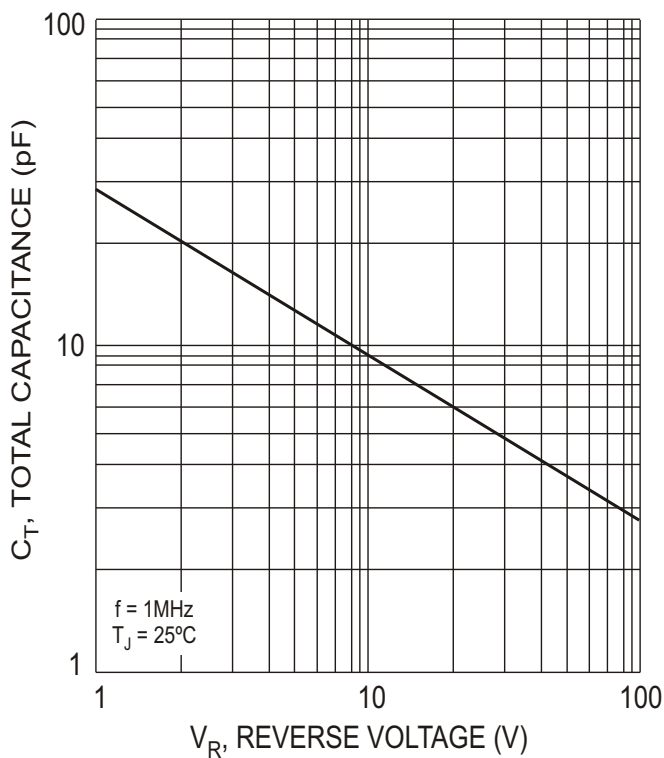


Fig. 3 Typical Total Capacitance vs. Reverse Voltage

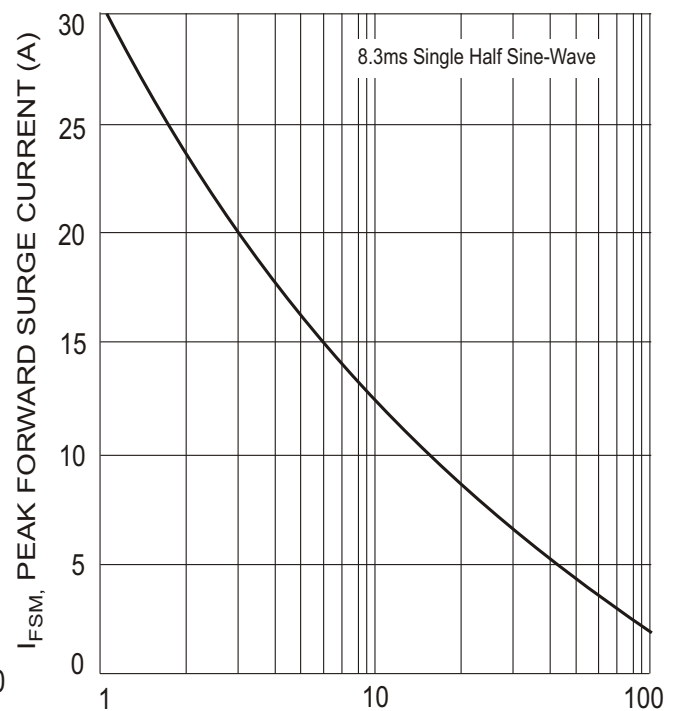
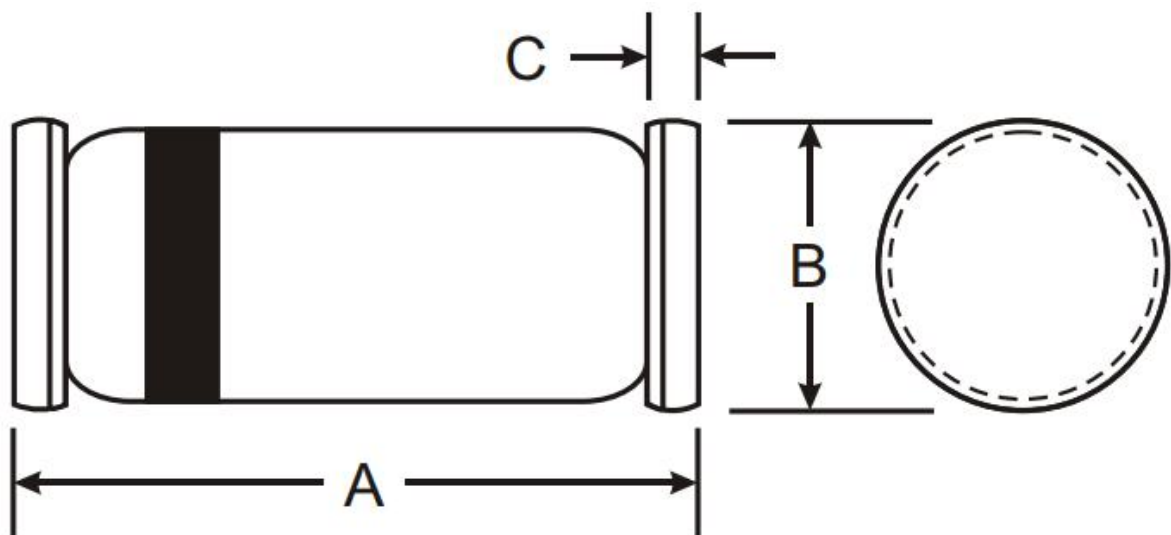
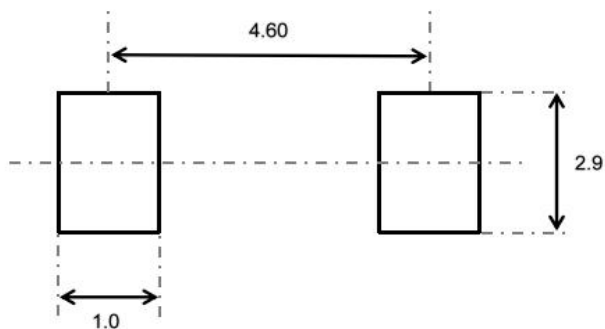


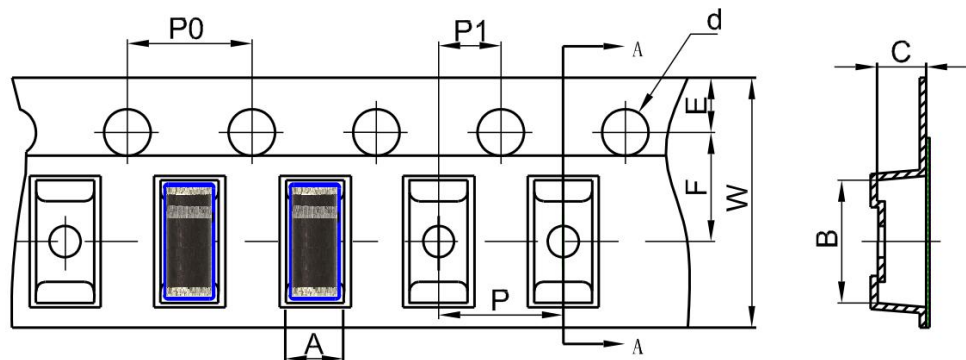
Fig. 4 Max Non-Repetitive Peak Forward Surge Current

GENERAL PURPOSE RECTIFIER DIODE**MELF Package Outline Dimensions**

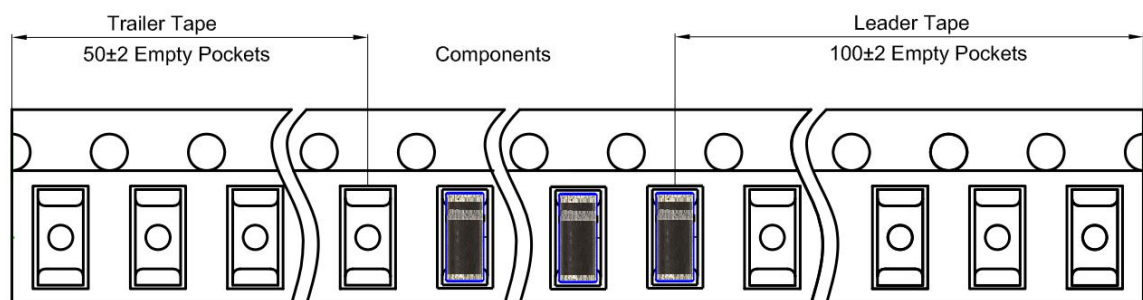
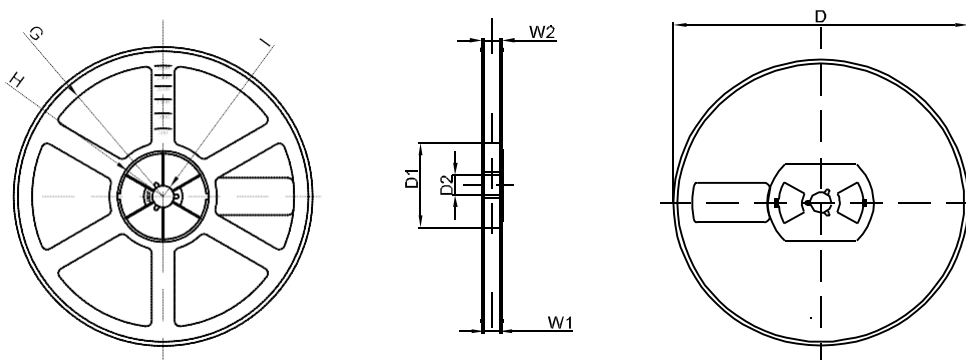
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.70	5.20	0.185	0.205
B	2.40	2.67	0.095	0.105
C	0.46	0.56	0.018	0.022

MELF Suggested Pad Layout**Note:**

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

GENERAL PURPOSE RECTIFIER DIODE**MELF Tape and Reel****MELF Embossed Carrier Tape**

DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
MELF	2.75	5.25	2.70	Ø1.50	1.75	5.50	4.00	4.00	2.00	12.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

MELF Tape Leader and Trailer**MELF Reel**

DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
7" DIA	Ø178	54.40	13.00	R78	R25.60	R6.50	12.40	17.60
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1