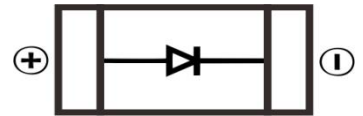


**GENERAL PURPOSE RECTIFIER DIODE**
**FEATURES**

- 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
- Weight: 0.25 grams (approximate)


**MAXIMUM RATINGS (T<sub>A</sub> = 25°C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	V
DC Blocking Reverse Voltage	V <sub>R</sub>	50	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	V
Maximum Average Forward Rectified Current	I <sub>F</sub>	1	A
Non-Repetitive Peak Forward Surge Current @t@=8.3ms	I <sub>FSM</sub>	30	A
Thermal Resistance From Junction To Ambient	R <sub>θJA</sub>	50	°C/W
Reverse Recovery Time(@I <sub>F</sub> =0.5A, I <sub>R</sub> =1.0A, I <sub>RR</sub> =0.25A)	t <sub>rr</sub>	2.5	uS
Junction Temperature	T <sub>J</sub>	-55 ~+150	°C
Storage Temperature	T <sub>STG</sub>	-55 ~+150	°C

**ELECTRICAL CHARACTERISTICS (T<sub>A</sub> = 25°C unless otherwise specified)**

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V <sub>F</sub>			1.1	V	I <sub>F</sub> =1A
Reverse current	I <sub>R</sub>			5	uA	V <sub>R</sub> =50V
Diode capacitance	C <sub>D</sub>		15		pF	V <sub>R</sub> =4V <sub>DC</sub> , f=1MHz

GENERAL PURPOSE RECTIFIER DIODE

Typical Characteristics

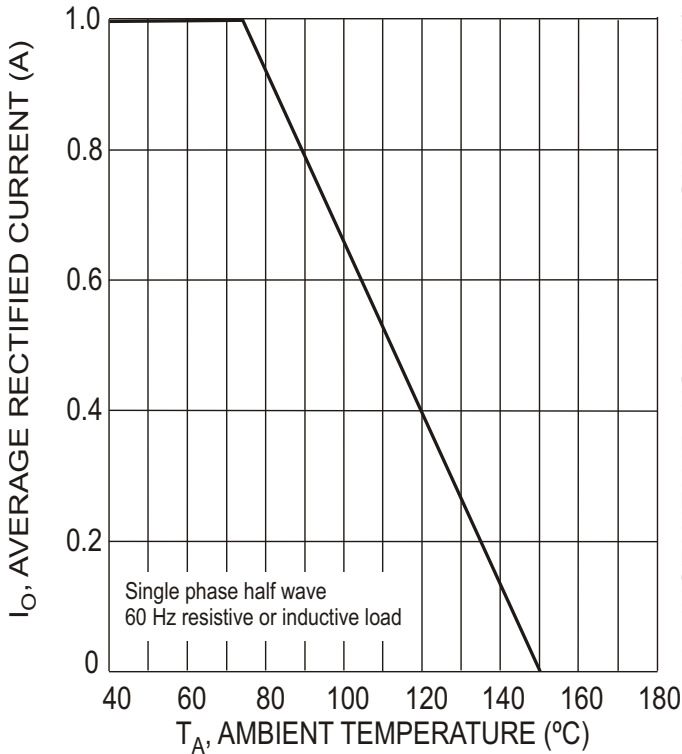


Fig. 1 Forward Current Derating Curve

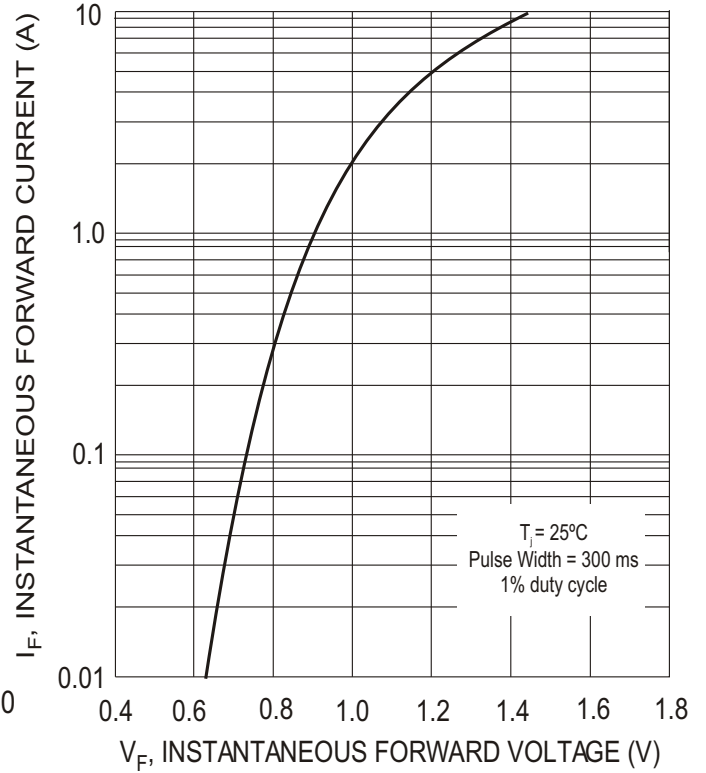


Fig. 2 Typical Forward Characteristics

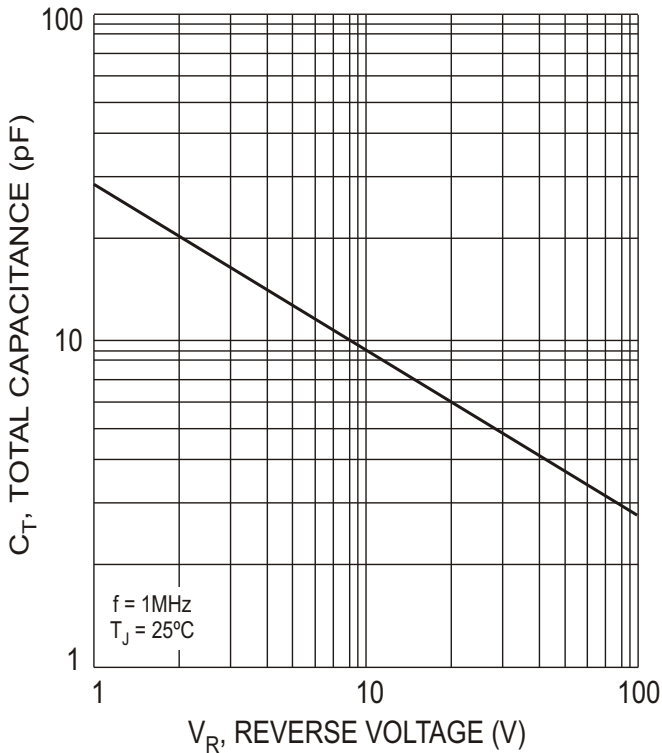


Fig. 3 Typical Total Capacitance vs. Reverse Voltage

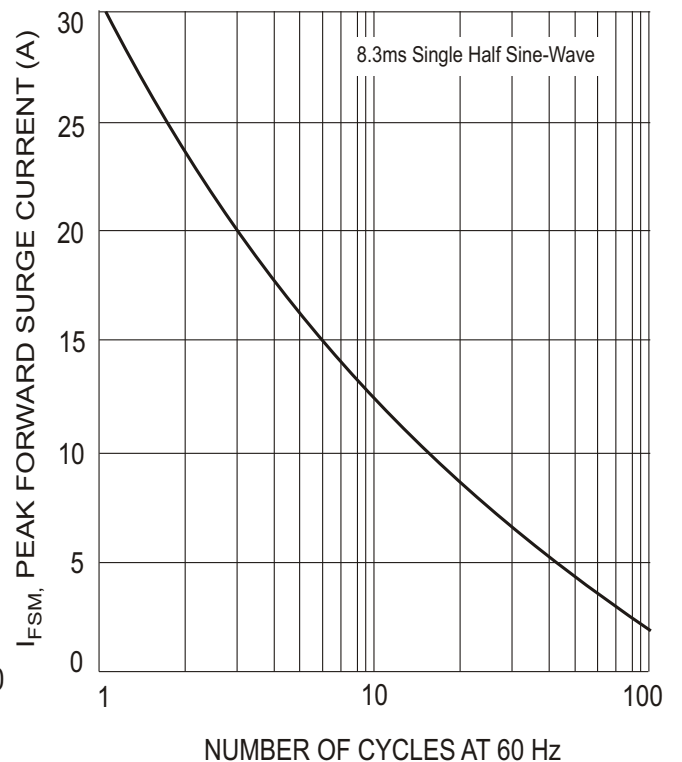
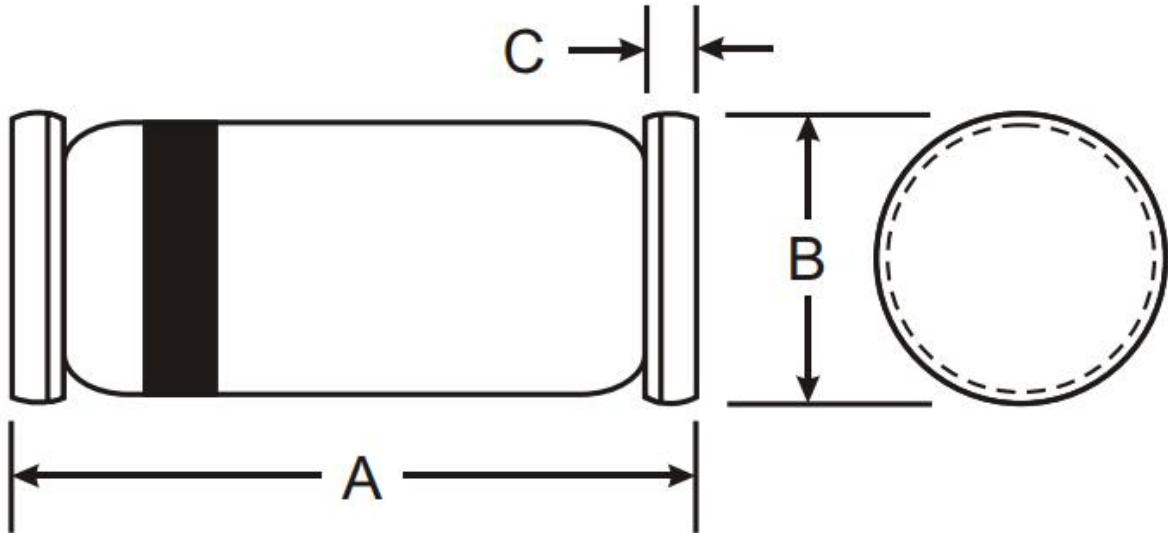


Fig. 4 Max Non-Repetitive Peak Forward Surge Current

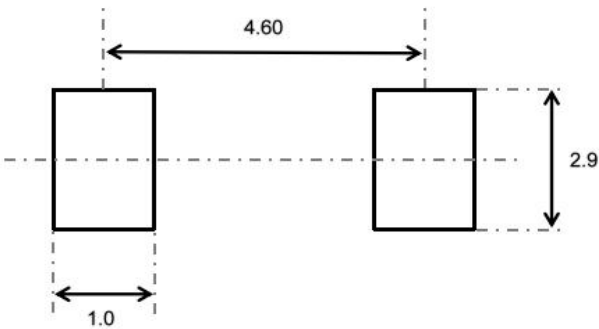
GENERAL PURPOSE RECTIFIER DIODE

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



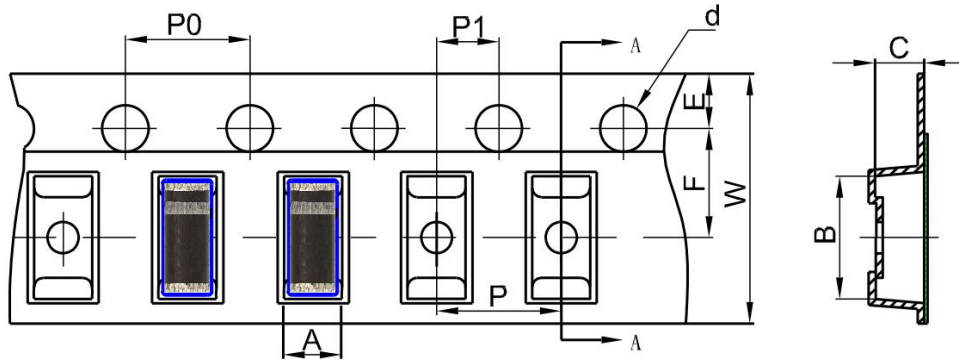
**Note:**

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

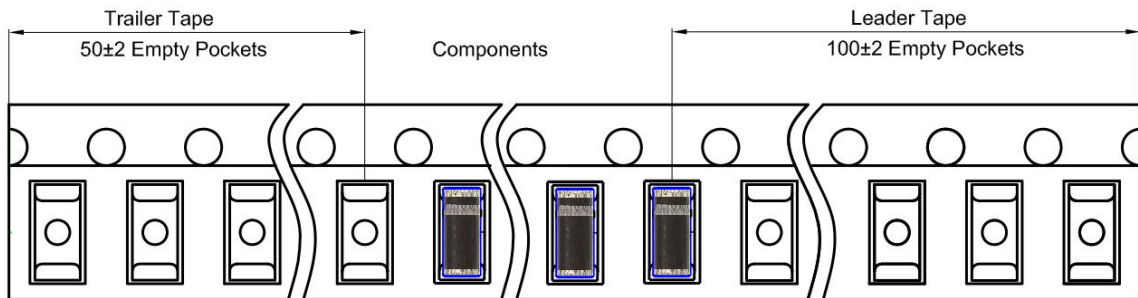
MELF Tape and Reel

MELF Embossed Carrier Tape

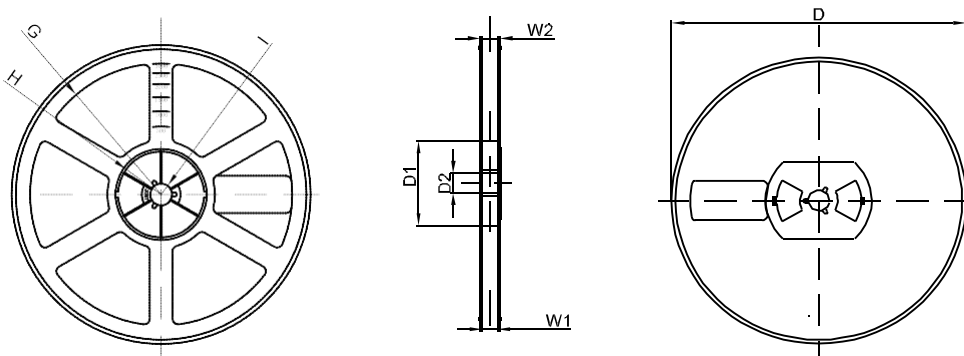


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
MELF	2.75	5.25	2.70	Ø1.50	1.75	5.50	4.00	4.00	2.00	12.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

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