

Technical Data  
Data Sheet M2630, Rev.A

## MURF1040 ULTRAFAST PLASTIC RECTIFIER

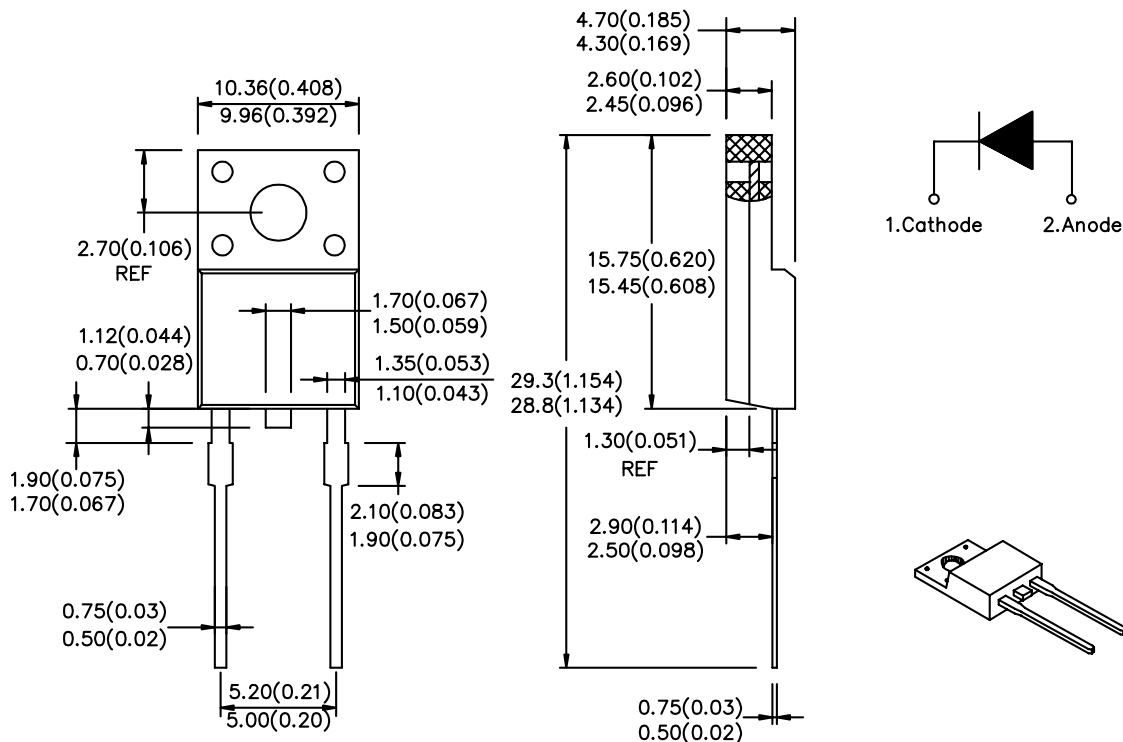
### Features:

- Ultra-Fast Switching
- High Current Capability
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability Classification 94V-0

### Mechanical Data:

- Case: ITO-220AC Full Molded Plastic
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208
- Weight: 2.0 grams (approx.)
- Marking: Type Number
- Mounting Position: Any

### Mechanical Dimensions: In mm / Inches



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**Maximum Ratings:**

Characteristics	Symbol	Condition	Max.	Units
Peak Inverse Voltage	$V_{RWM}$	-	400	V
Max. Average Forward	$I_{O(AV)}$	50Hz, Sine wave, $T_C=86^\circ\text{C}$	10	A
Max. Peak One Cycle Non-Repetitive Surge Current (Per leg)	$I_{FSM}$	50Hz, Half Sine wave	120	A

**Electrical Characteristics:**

Characteristics	Symbol	Condition	Max.	Units
Max. Forward Voltage Drop (Per leg)*	$V_F$	@ $I_F=7.5\text{A}$ , Pulse, $T_J = 25^\circ\text{C}$	1.26	V
Max. Reverse Current (Per leg)*	$I_{R1}$	@ $V_R = \text{rated } V_R$ $T_J = 25^\circ\text{C}$	10	$\mu\text{A}$
	$I_{R2}$	@ $V_R = \text{rated } V_R$ $T_J = 125^\circ\text{C}$	1.0	mA
Max.ReverseRecoveryTime (Per leg)*	$t_{rr}$	$I_F=500\text{mA}$ , $I_R=1\text{A}$ , and $I_{rm}=250\text{mA}$	50	ns

\* Pulse width < 300  $\mu\text{s}$ , duty cycle < 2%

**Thermal-Mechanical Specifications:**

Characteristics	Symbol	Condition	Specification	Units
Max. Junction Temperature	$T_J$	-	-55 to +150	$^\circ\text{C}$
Max. Storage Temperature	$T_{stg}$	-	-55 to +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$		2	$^\circ\text{C}/\text{W}$
Approximate Weight	wt	-	2	g
Case Style	ITO-220AC			

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