



MUR860 / MUR860D / MUR860F / MUR860S

SUPERFAST RECOVERY RECTIFIERS

Voltage

600 V

Current

8 A

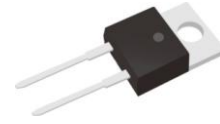
Features

- Superfast recovery times-epitaxial construction
- Low forward voltage, high current capability
- Hermetically sealed.
- Low leakage
- High surge capacity
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. .(Halogen Free)

Mechanical Data

- Case: Molded plastic, TO-220AC, ITO-220AC, TO-263, TO-252
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color Band denotes cathode end
- TO-220AC Approx. Weight: 0.067 ounces, 1.89 grams
- ITO-220AC Approx. Weight: 0.055 ounces, 1.56 grams
- TO-263 Approx. Weight: 0.051 ounces, 1.46 grams
- TO-252 Weight: 0.0104 ounces, 0.297 grams
- Marking: Part number

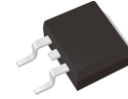
MUR860 TO-220AC



MUR860F ITO-220AC



MUR860D TO-263



MUR860S TO-252



Maximum Ratings ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	600	V
Maximum rms voltage	V_{RMS}	420	V
Maximum dc blocking voltage	V_R	600	V
Maximum average forward current	$I_{F(AV)}$	8	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100	A
Maximum forward voltage at 8A	V_F	1.5	V
Maximum dc reverse current at rated dc blocking voltage	I_R	5	μA
Operating and storage temperature range	T_J, T_{STG}	-55 to +175	$^{\circ}\text{C}$



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Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER		SYMBOL	LIMIT	UNIT
Maximum reverse recovery time	(Note 3)	T_{RR}	50	ns
Typical thermal resistance	TO-220AC(Note 1)	$R_{\theta JC}$	2.5	$^\circ\text{C/W}$
	ITO-220AC (Note 1)	$R_{\theta JC}$	6.5	
	TO-263(Note 1)	$R_{\theta JC}$	5	
	TO-252(Note 2)	$R_{\theta JC}$	6.5	

- Note : 1. Device mounted on a infinite heatsink, then measured the center of the marking side.
 2. Mounted on a 10cm*10cm*1mm copper pad area
 3. Reverse Recovery Test Conditions : $I_F=0.5\text{A}$, $I_R=1\text{A}$, Recover to 0.25A

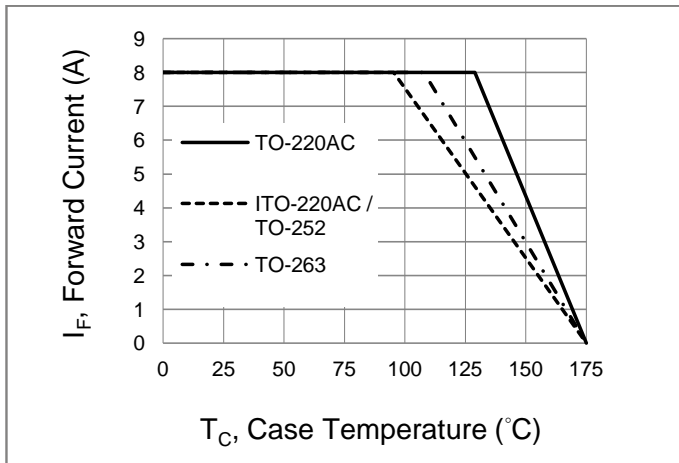


Fig.1 Forward Current Derating Curve

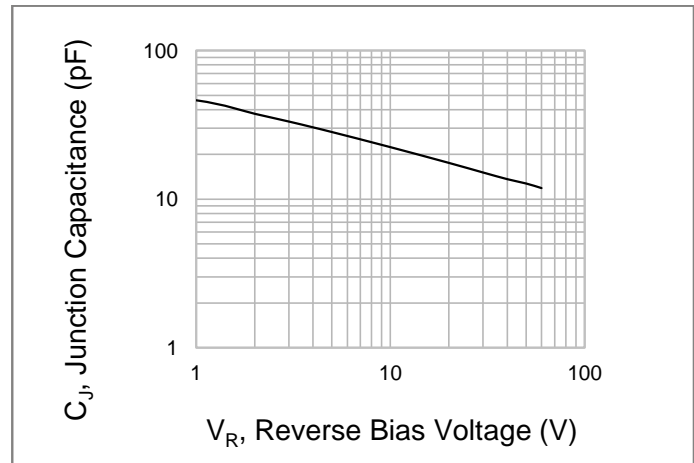


Fig.2 Typical Junction Capacitance

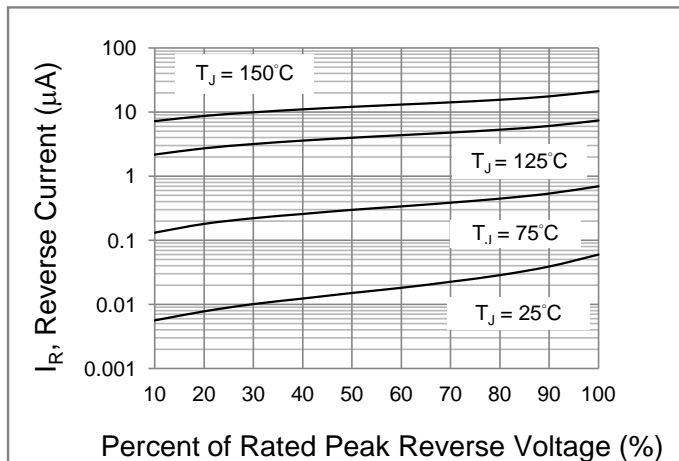


Fig.3 Typical Reverse Characteristics

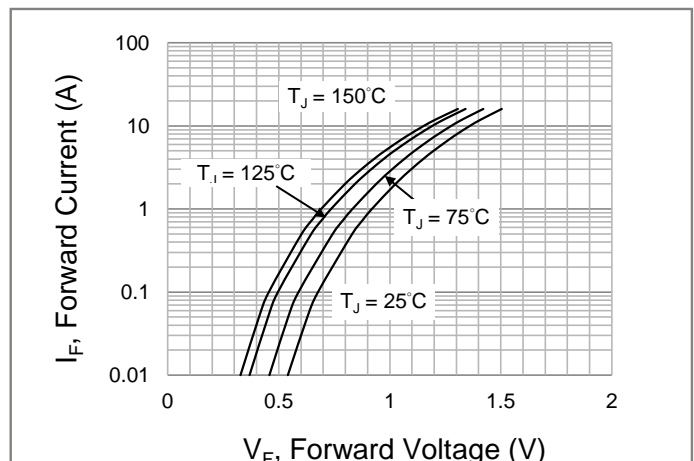


Fig.4 Typical Forward Characteristics



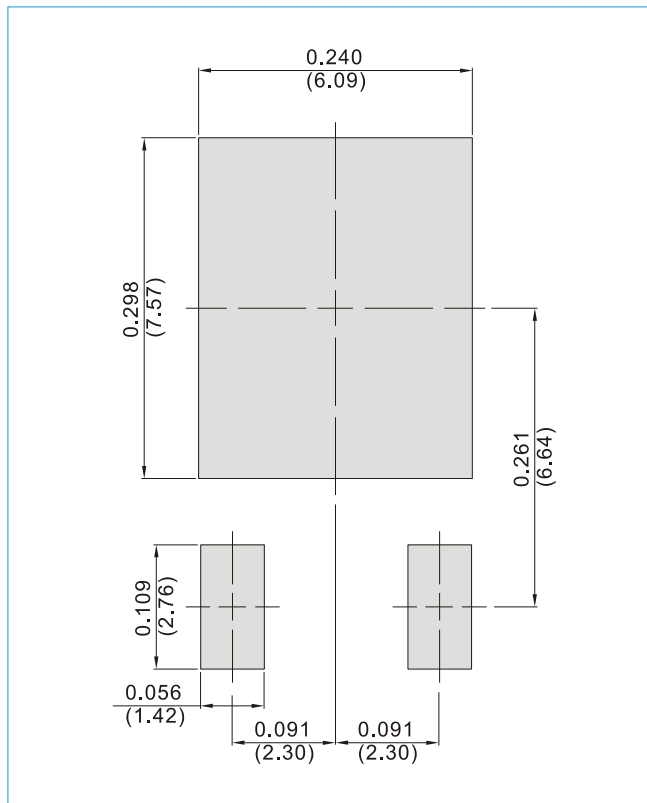
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PART NO PACKING CODE VERSION

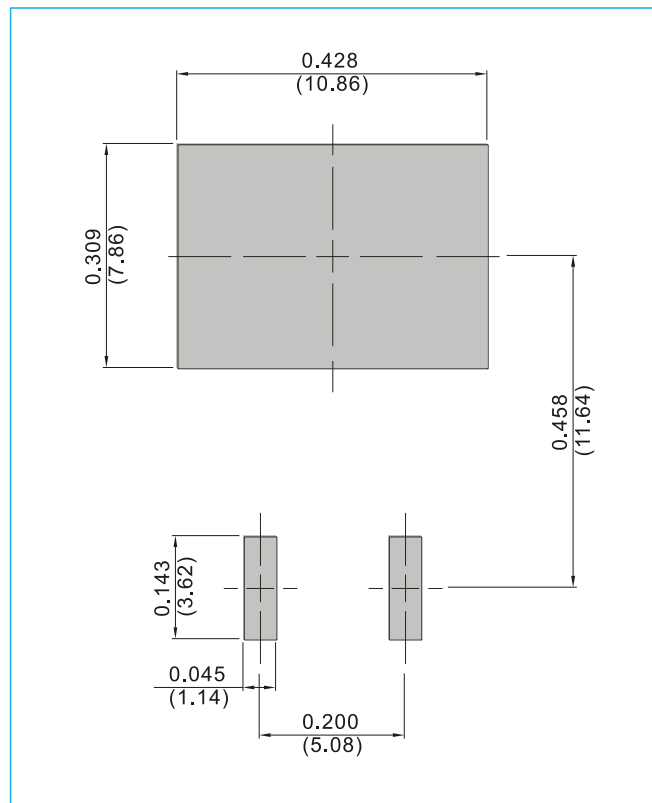
PART NO PACKING CODE	Package Type	Packing type	Marking	Version
MUR860_TO_00001	TO-220AC	50 pcs / Tube	MUR860	Halogen free
MUR860F_TO_00001	ITO-220AC	50 pcs / Tube	MUR860F	Halogen free
MUR860D_R2_00001	TO-263	0.8K pcs / 13" reel	MUR860D	Halogen free
MUR860S_L2_00001	TO-252	3K pcs / 13" reel	MUR860S	Halogen free

MOUNTING PAD LAYOUT

TO-252 Unit : inch(mm)



TO-263 / D²PAK Unit : inch(mm)

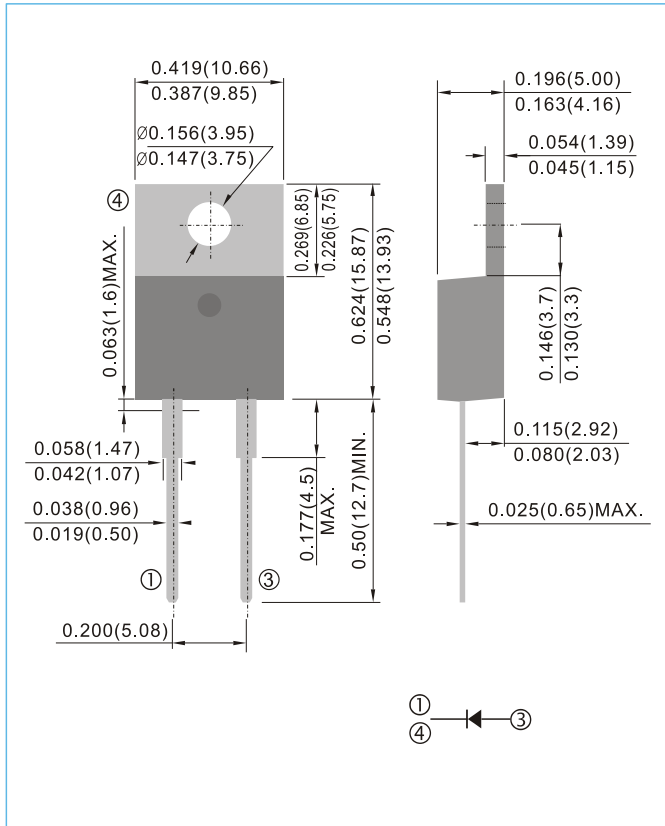




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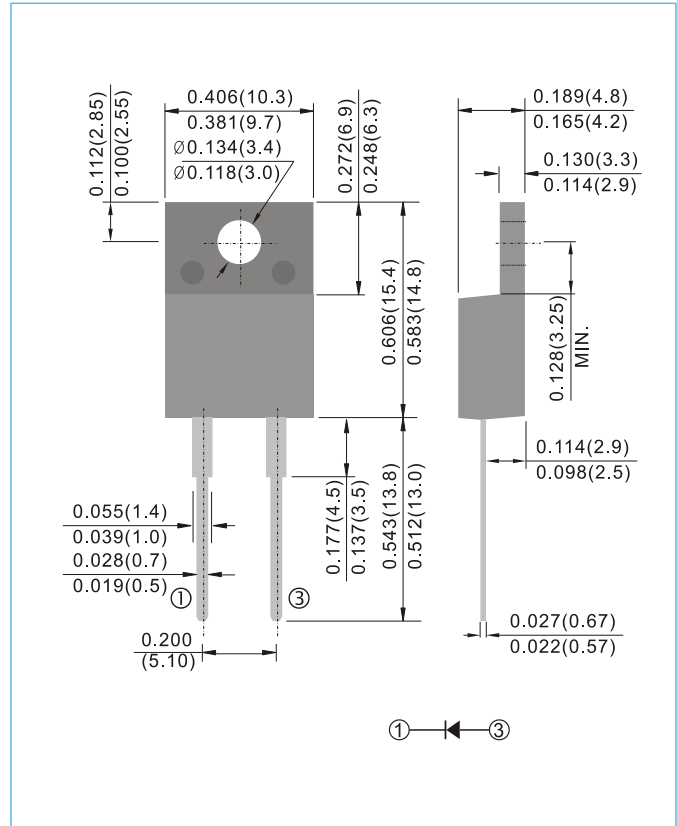
TO-220AC

Unit : inch(mm)



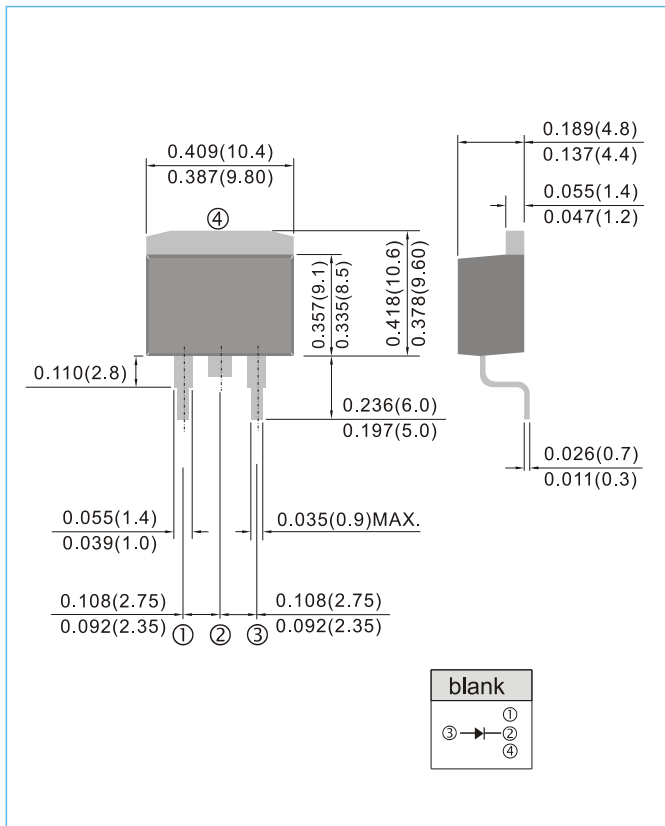
ITO-220AC

Unit : inch(mm)



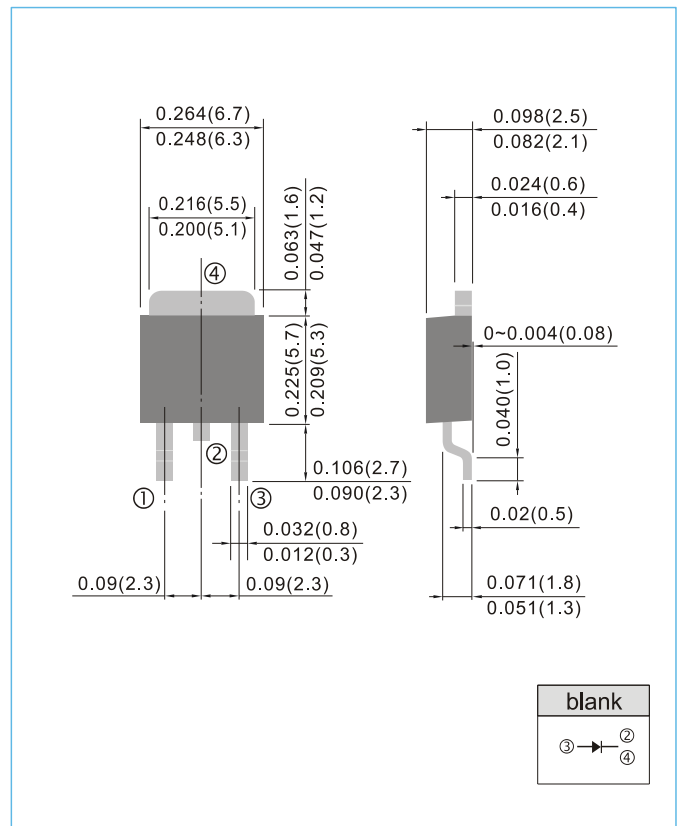
TO-263 / D²PAK

Unit : inch(mm)



TO-252

Unit : inch(mm)





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