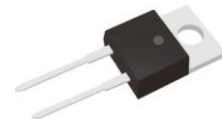


Features

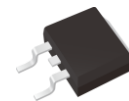
- ◇ Superfast recovery times-epitaxial construction
- ◇ Low forward voltage,High current capability
- ◇ Fast switching for high efficiency
- ◇ Excellent low reverse leakages
- ◇ Excellent high temperature stability
- ◇ Low stored charge majority carrier conduction
- ◇ High forward surge capability
- ◇ Lead free finish ,Rohs and WEEE compliant.



VU[®]EGE0D



QU[®]EGE0D



VU[®]GH

Applications

- ◇ DC to DC converter
- ◇ Switching mode converters and inverters
- ◇ Lighting application
- ◇ Freewheeling application

Mechanical Data

- ◇ Moisture Sensitivity: MSL Level 1,per J-STD-020
- ◇ Terminals:Matte Tin Finish.
Solderable per MIL-STD-202 Method 208
- ◇ Case Material: Molded Plastic;
Molding compound meet UL Flammability Classification Rating 94V-0
- ◇ Case:JEDEC TO-220AC,ITO-AC,TO-263

MAXIMUM RATING

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	VALUE	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RWS}	420	V
Maximum DC blocking voltage	V_{DC}	600	V
Maximum average forward rectified current	$I_{F(AV)}$	15	A
Peak forward surge current 8.3ms half-sine-wave	I_{FSM}	225	A
I ² t Rating for Fusing(t<8.3ms)	I^2t	210	A ² s
Typical Thermal Resistance	TO-220AC	$R_{\theta JA}$	30 °C/W
		$R_{\theta JC}$	2.5 °C/W
	ITO-220AC	$R_{\theta JC}$	6.5 °C/W
		TO-263	$R_{\theta JC}$
Typical junction capacitance: VR=4.0v,f=1MHz	C_J	100	pF
Junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55~150	°C

ELECTRICAL CHARACTERISTICS

PARAMETER	TEST CONDITIONS	SYMBOL	VALUE			UNITS	
			Min	Typ	Max		
Breakdown voltage per diode(min)	IR=0.01mA	VB _R	600	-	-	V	
Instantaneous forward voltage	IF=15A per Ige	TA= 25°C	VF	-	1.20	1.50	V
		TA= 125°C	VF	-	1.0	-	V
Maximum DC reverse current @Rated DC Blocking Voltage	TA= 25°C	IR	-	0.02	10	μ A	
	TA=125°C	IR	-	8.0	500	μ A	
Reverse Recovery Time (IF=0.5A, IR=1.0A, IRR=0.25A)	MUR1560	trr	-	45	50	ns	
	MUR1560B	trr	-	33	50	ns	
	MUR1560E	trr	-	33	50	ns	
	MUR1560F	trr	-	33	50	ns	

ORDERING PACK INFORMATION

Part No.	Package	Packing	Box Size L×W×H(mm)	Quantity(pcs/box)	Carton Size L×W×H(mm)	Quantity(pcs/carton)
MUR1560	TO-220AC	50pcs/Tube	558×148×38	1000	565×225×170	5000
MUR1560B	TO-263	50pcs/Tube	558×148×38	1000	565×225×170	5000
MUR1560E	ITO-220AC	50pcs/Tube	558×148×38	1000	565×225×170	5000
MUR1560F	ITO-220AB	50pcs/Tube	558×148×38	1000	565×225×170	5000

RATING AND CHARACTERISTICS CURVES

FIG-1 TYPICAL FORWARD CHARACTERISTICS

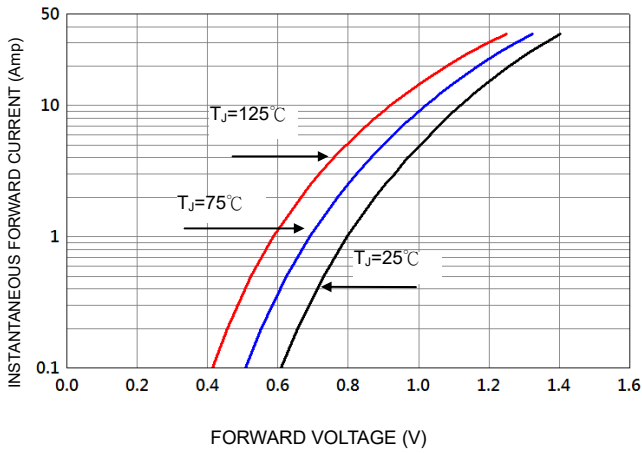


FIG-3 FORWARD CURRENT DERATING CURVE

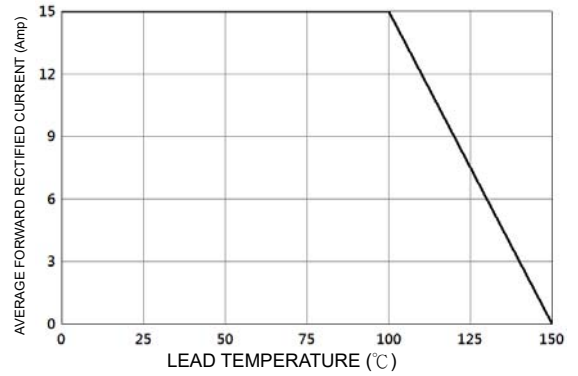


FIG-2 TYPICAL REVERSE CHARACTERISTICS

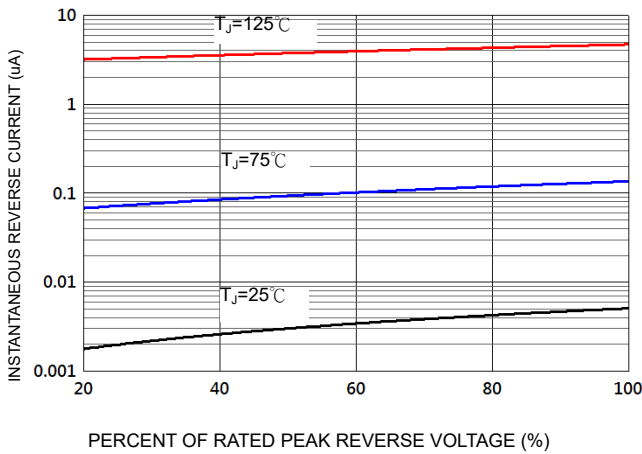


FIG-4 TYPICAL JUNCTION CAPACITANCE

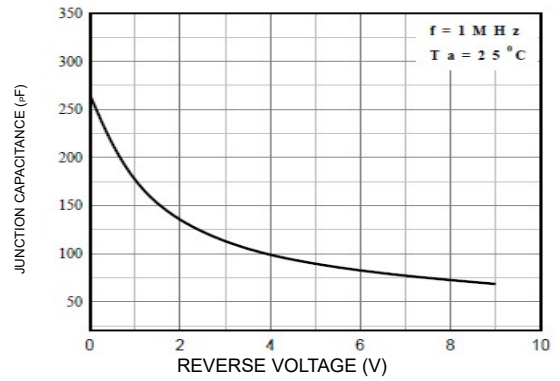
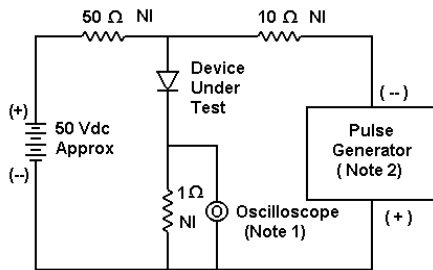
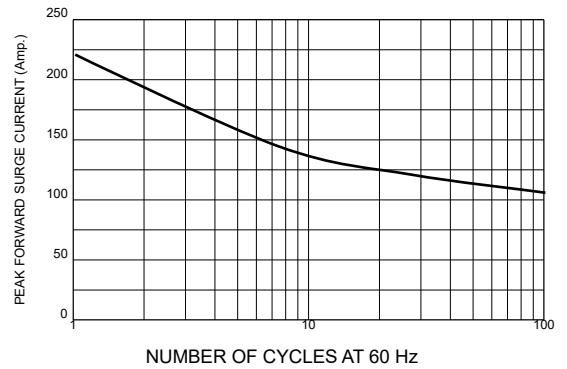
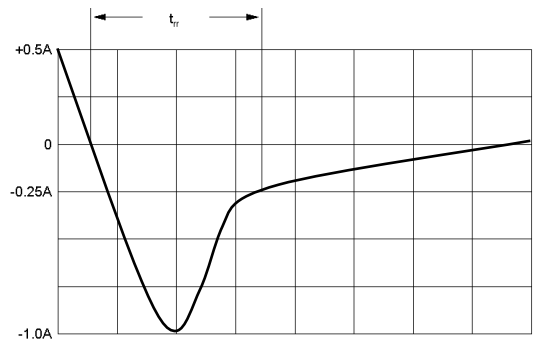


FIG-5 PEAK FORWARD SURGE CURRENT



- Notes:
 1. Rise Time = 7 ns max. Input Impedance = 1 M Ω , 22 pF
 2. Rise Time = 10 ns max. Input Impedance = 50 Ω



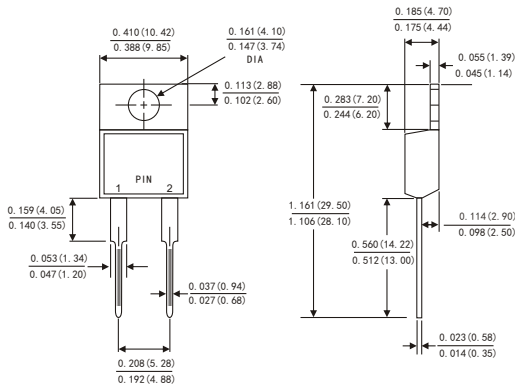
Set time base for 10/20 ns/cm

FIG-6 Reverse Recovery Time Characteristic and Test Circuit Diagram

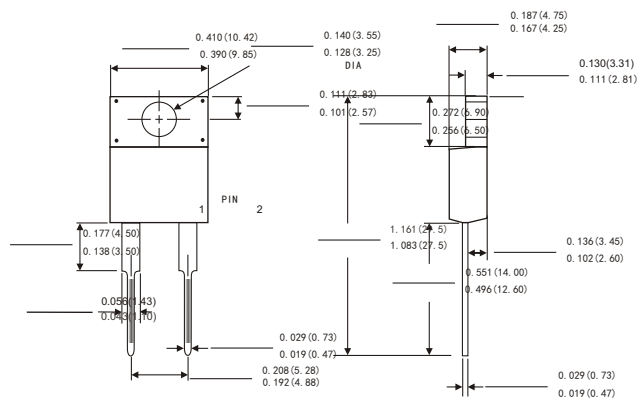
PACKAGE OUTLINE DIMENSIONS



TO-220AC



ITO-220AC



TO-263

