



MUR1660(F)CT

Ultrafast Recovery Planar Diode
Reverse Voltage 600 Volts Forward Current 16 Amperes

Features

- FRED (Planar) wafer construction
- Ultrafast recovery time
- Low forward voltage drop, low power losses
- High efficiency operation
- Plastic package has underwriters Laboratory
Flammability Classification 94V-0



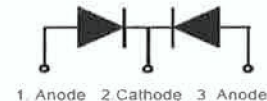
Package: ITO-220-AB



Package: TO-220-AB

Mechanical Data

- Case: Epoxy, Molded
- Weight: 1.9grams (approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 sec
- Shipped 50 units per plastic tube



Maximum Ratings & Electrical Characteristics

(TA=25°C. unless otherwise noted)

PARAMETER		TEST CONDITIONS		SYMBOL	MUR1660(F)CT	UNIT
Maximum repetitive peak reverse voltage				VRRM	600	V
Working peak reverse voltage				VRWM	600	V
Maximum DC blocking voltage				VDC	600	V
Maximum average forward rectified current at Tc=105°C total device per diode				IF(AV)	16 8	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode				IFSM	125	A
Voltage rate of change (rated VR)				DV/dt	10000	V/us
Operating junction temperature range				TJ	—55 to+150	°C
Storage temperature range				TSTG	—55 to+150	°C
Maximum Reverse Recover Time (If=0.5Amp, IR=1.0Amp,Irec=0.25Amp)		Trr		Trr	50	ns
Maximum instantaneous forward voltage per leg		If=8A If=8A	Tc=25°C Tc=125°C	VF	1.50 1.40	V
Maximum reverse current per leg at working peak Reverse voltage			TJ=25°C TJ=100°C	IR	10 500	uA uA
Thermal Characteristics TA=25°C unless otherwise noted						
Symbol	Parameter	TYP (TO-220-AB)		TYP (ITO-220-AB)		Unit
RθJC	Thermal Resistance, Junction to Case per Leg	2.0		4.0		°C /W
RθJA	Thermal Resistance, Junction to Ambient per Leg	62.5		62.5		°C /W

Note: Pulse test:300us pulse width, duty cycle=2%



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Ratings and Characteristics Curves

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

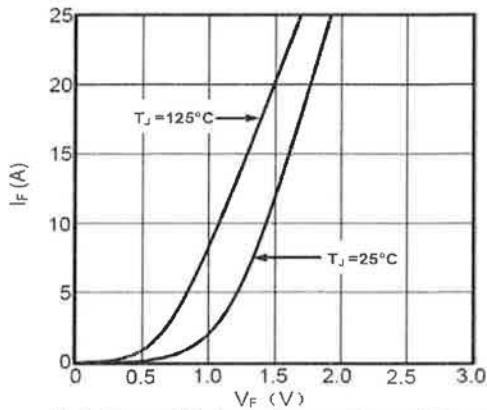


Fig1. Forward Voltage Drop vs Forward Current

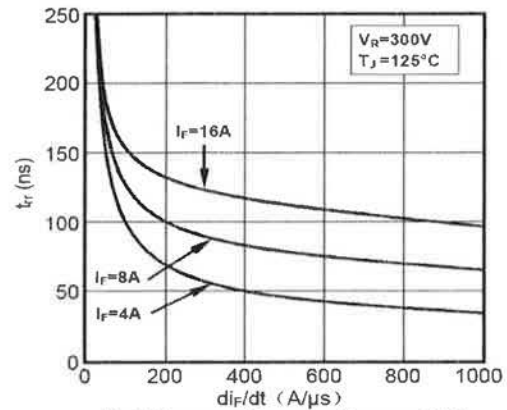


Fig2. Reverse Recovery Time vs di_F/dt

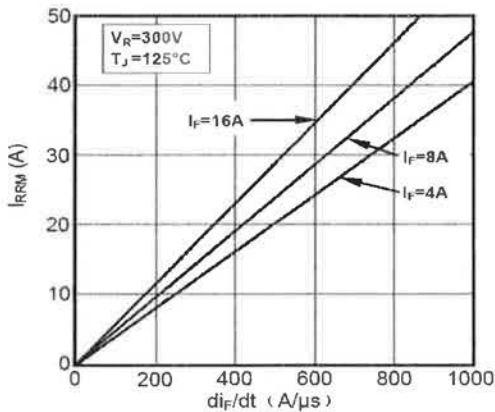


Fig3. Reverse Recovery Current vs di_F/dt

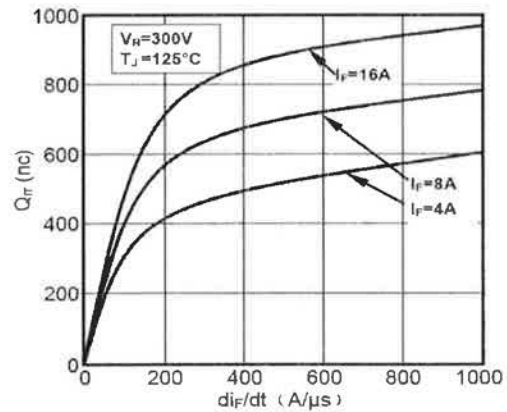


Fig4. Reverse Recovery Charge vs di_F/dt

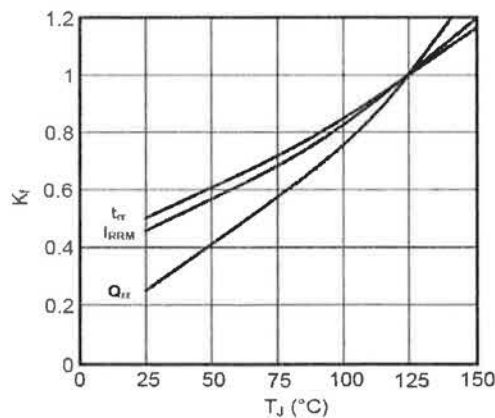


Fig5. Dynamic Parameters vs Junction Temperature

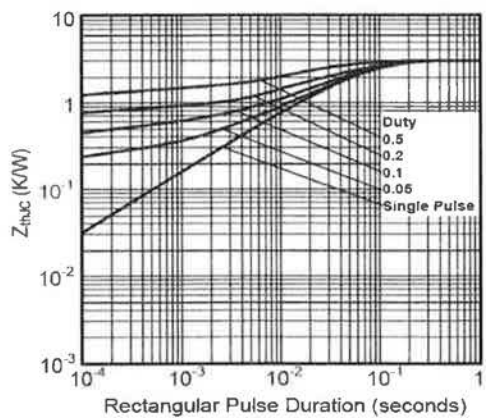


Fig6. Transient Thermal Impedance



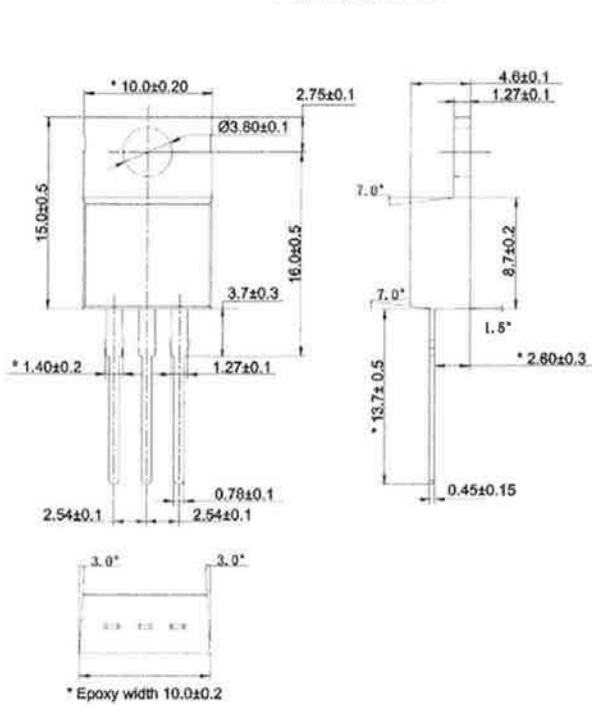
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Package Outline Dimensions

Unit: millimeters

TO-220-AB



ITO-220-AB

