

Features

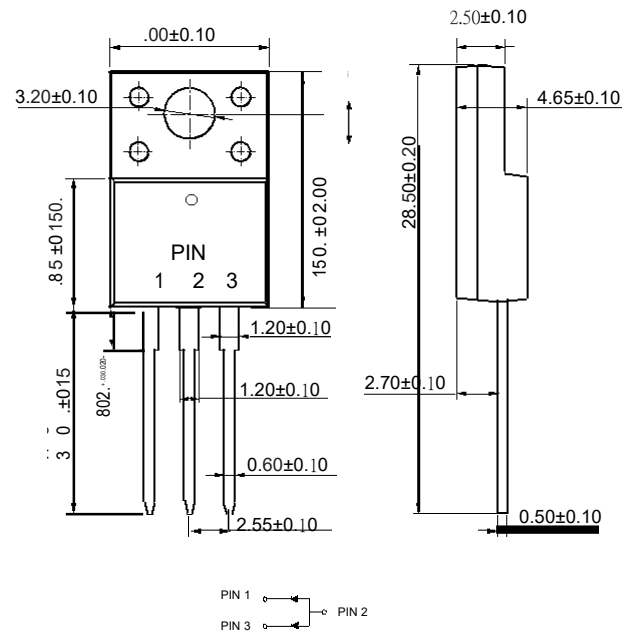
- ◇ High frequency operation
- ◇ High surge forward current capability
- ◇ High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- ◇ Guard ring for enhanced ruggedness and long term reliability
- ◇ Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

- ◇ Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

Mechanical Data

- ◇ **Package:** ITO-220AB
- ◇ Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- ◇ **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- ◇ **Polarity:** As marked



Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MUR1610FCTR	MUR1615FCTR	MUR1620FCTR	MUR1640FCTR	MUR1660FCTR
Device Marking Code			MUR1610FCTR	MUR1615FCTR	MUR1620FCTR	MUR1640CTR	MUR1660FCTR
Repetitive Peak Reverse Voltage	VRRM	V	100	150	200	400	600
Average Rectified Output Current @60Hz half sine-wave, R-load, Tc(FIG.1)	Io	A	16				
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, Ta=25°C	IFSM	A	100				
Current Squared Time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I ² t	A ² s	41				
Storage Temperature	Tstg	°C	-55 ~ +150				
Junction Temperature	Tj	°C	-55 ~ +150				

Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MUR1610FCTR	MUR1615FCTR	MUR1620FCTR	MUR1640FCTR	MUR1660FCTR
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=8.0A	0.98			1.3	1.75
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM1	uA	VRM=VRRM Ta=25°C	10				
	IRRM2		VRM=VRRM Ta=125°C	500				
Reverse Recovery Time	Trr	ns	IF=0.5A IRM=1A IRR=0.25A	35				

Thermal Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MUR1610FCTR	MUR1615FCTR	MUR1620FCTR	MUR1640FCTR	MUR1660FCTR
Thermal Resistance	R _{BJ-C}	°C/W	2.9				

Ordering Information (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR1610FCTR THRU MUR1660FCTR	Approximate 1.88	50	1000	5000	Tube

Characteristics (Typical)

FIG1: I_o - T_c Curve

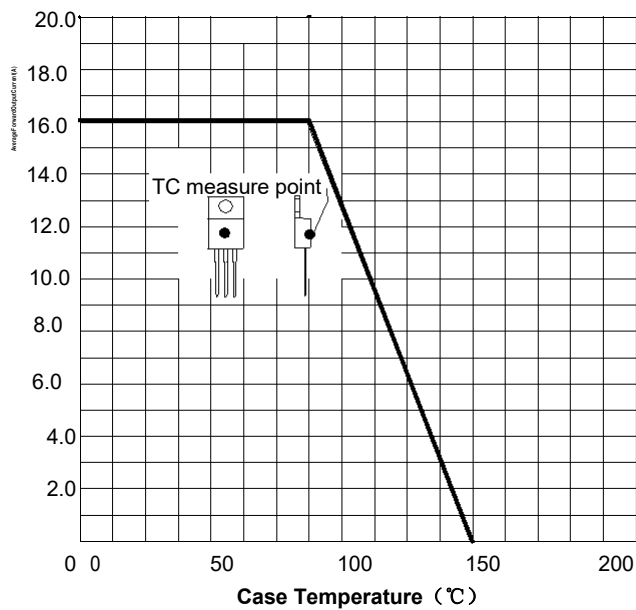


FIG2: Surge Forward Current Capability

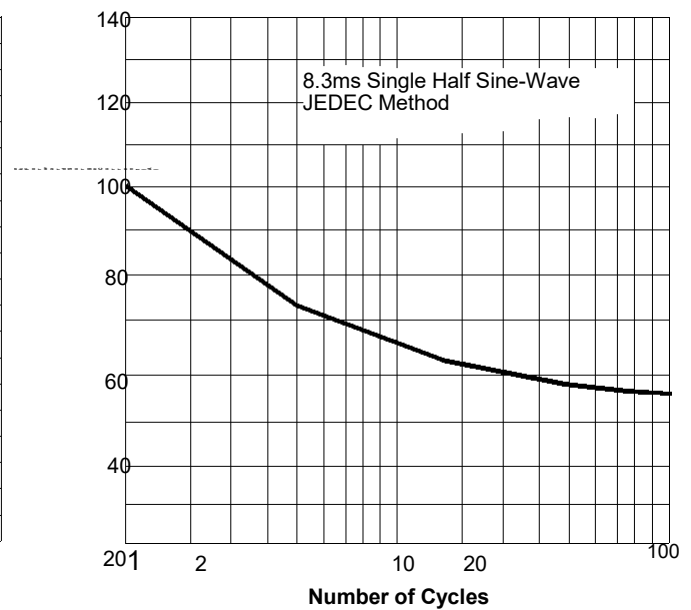


FIG3: Forward Voltage

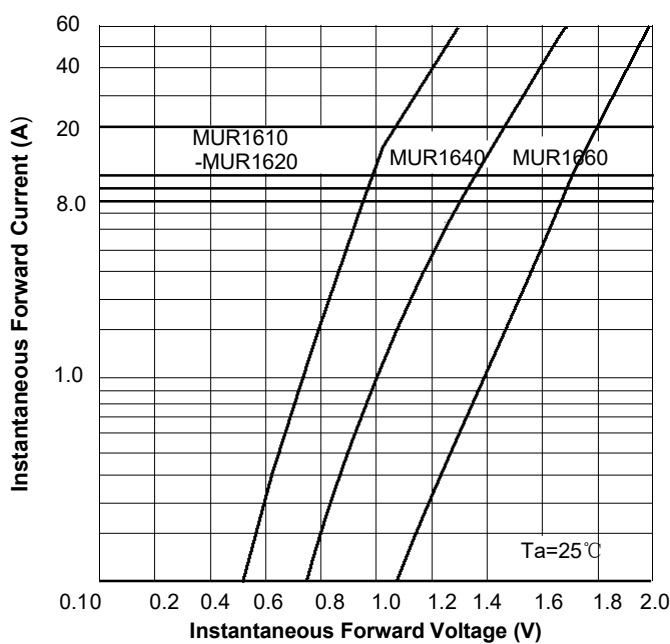


FIG4: Typical Reverse Characteristics

