MUR1610CT~MUR1660CT

16.0AMP Ultra-Fast Recovery Rectifier Diodes

TO-220AB

Features

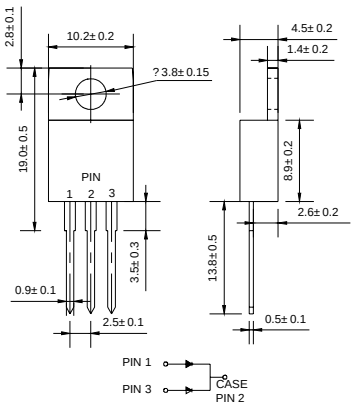
- High frequency operation
- High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

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

Mechanical Data

- **Package**: TO-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



Dimensions in millimeters

■Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MUR1610CT	MUR1615CT	MUR1620CT	MUR1640CT	MUR1660CT
Device Marking Code			MUR1610CT	MUR1615CT	MUR1620CT	MUR1640CT	MUR1660CT
Repetitive Peak Reverse Voltage	V_{RRM}	V	100	150	200	400	600
Average Rectified Output Current @60Hz half sine-wave, R-load, Tc(FIG.1)	I_o	A	16				
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, Ta=25℃	I_{FSM}	A	100				
Current Squared Time @1ms≤t<8.3ms Tj=25℃,Rating of per diode	I^2t	A^2s	41				
Storage Temperature	T_{stg}	℃	-55 ~ +150				
Junction Temperature	T_j	℃	-55 ~ +150				

■Electrical Characteristics (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MUR1610CT	MUR1615CT	MUR1620CT	MUR1640CT	MUR1660CT
Maximum instantaneous forward voltage drop per diode	V_{FM}	V	I_{FM}=8.0A	0.975			1.3	1.5
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM1}	uA	$V_{RM}=V_{RRM}$ T_a=25℃	10				
	I_{RRM2}		$V_{RM}=V_{RRM}$ T_a=125℃	500				
Reverse Recovery Time	Trr	ns	I_F=0.5A I_{RM}=1A I_{RR}=0.25A	50				

■Thermal Characteristics (Ta=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	MUR1610CT	MUR1615CT	MUR1620CT	MUR1640CT	MUR1660CT
Thermal Resistance	Between junction and case	$R_{\theta J-C}$	℃/W	2.0				

■Ordering Information (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR1610CT THRU MUR1660CT	Approximate 1.88	50	1000	5000	Tube

■Characteristics (Typical)

FIG1:Io -Tc Curve

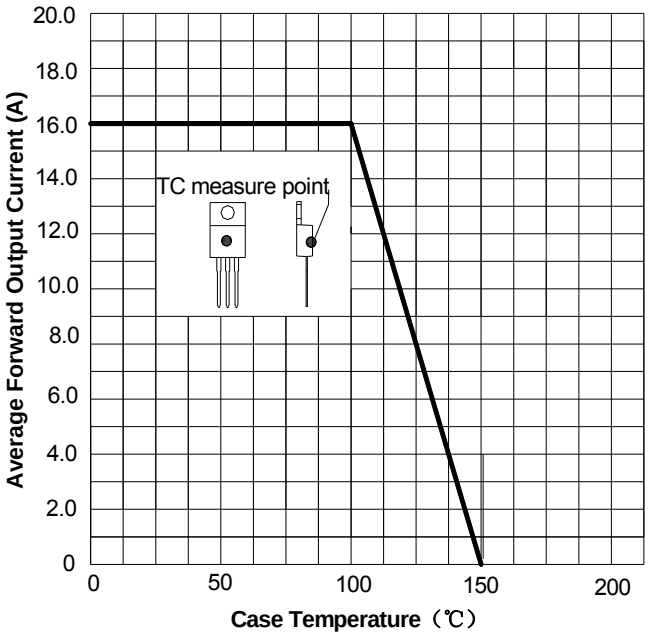


FIG2:Surge Forward Current Capability

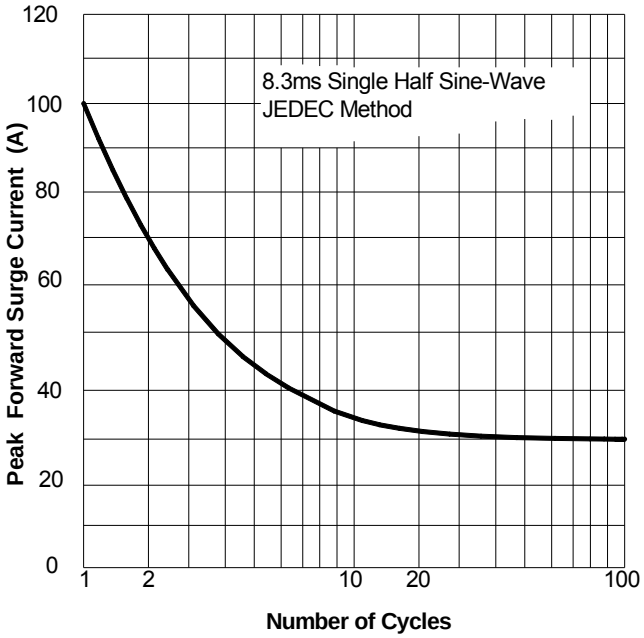


FIG3: Forward Voltage

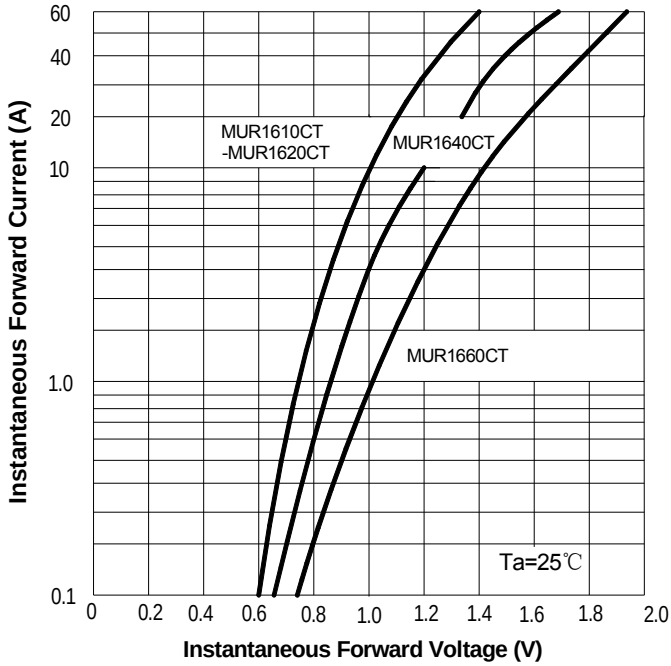


FIG4: Typical Reverse Characteristics

