

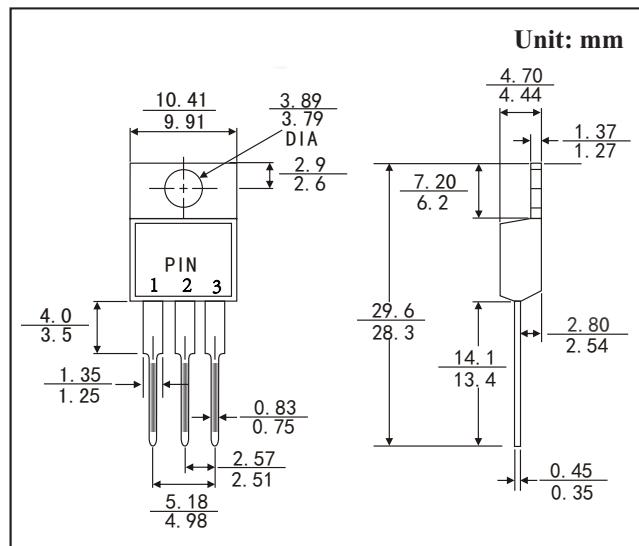
TO-220AB PLASTIC SILICON RECTIFIERS

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

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



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

PARAMETER	SYMBOL	UNIT	MUR2010CT	MUR2015CT	MUR2020CT	MUR2040CT	MUR2060CT
Device Marking Code			MUR2010CT	MUR2015CT	MUR2020CT	MUR2040CT	MUR2060CT
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			20		
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, Ta=25°C	IFSM	A			125		
Current Squared Time @1ms≤t≤8.3ms Tj=25 °C, Rating of per diode	I ² t	A ² s			65		
Storage Temperature	Tstg	°C			-55 ~ +150		
Junction Temperature	Tj	°C			-55 ~ +150		
Maximum instantaneous forward voltage drop per diode IFM=10.0A	VFM	V		0.975		1.3	1.5
Ta=25°C VRM=VRRM Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM1}	uA			10		
Ta=125°C VRM=VRRM	I _{RRM2}				500		
Reverse Recovery Time IRR=0.25A If=0.5A I _{RM} =1A	Tr _r	ns			50		
Thermal Resistance Between junction and case	R _{θJ-C}	°C/W			2.0		

■ Ordering Information (Example)

PREFERRED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MUR2010CT THRU MUR2060CT	Approximate 1.90	50	1000	5000	Tube

RATINGS AND CHARACTERISTIC CURVES

■ Characteristics (Typical)

FIG1: i_o - T_c Curve

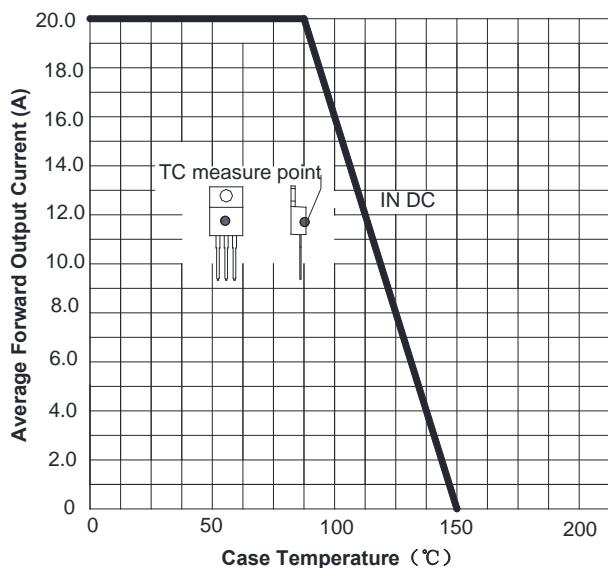


FIG2: Surge Forward Current Capability

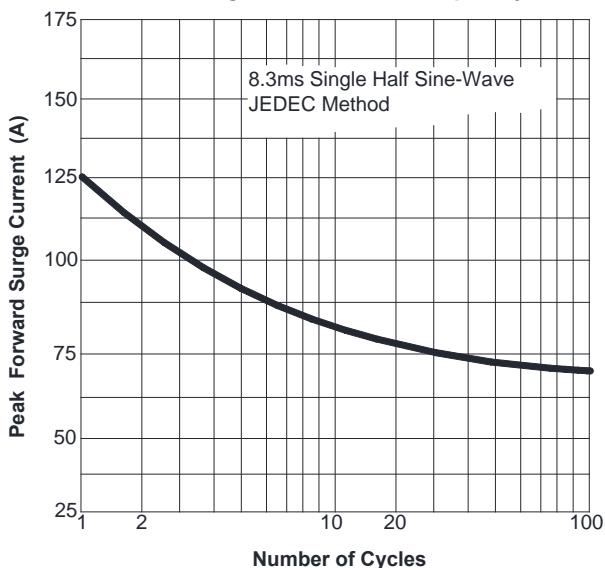


FIG3: Forward Voltage

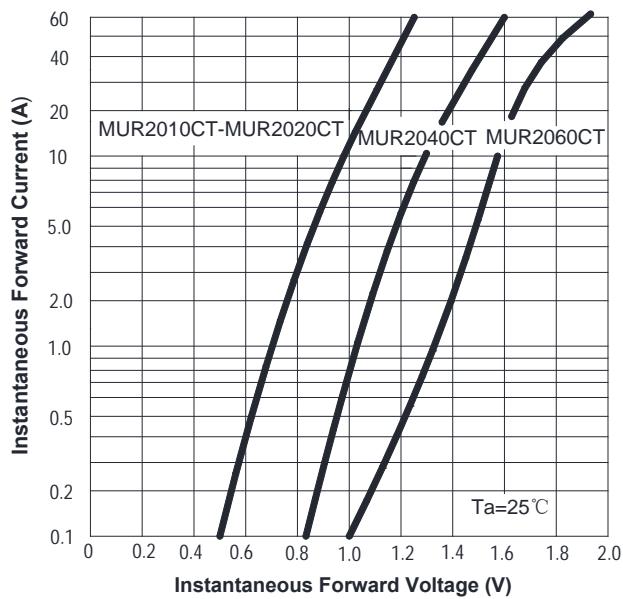


FIG4: Typical Reverse Characteristics

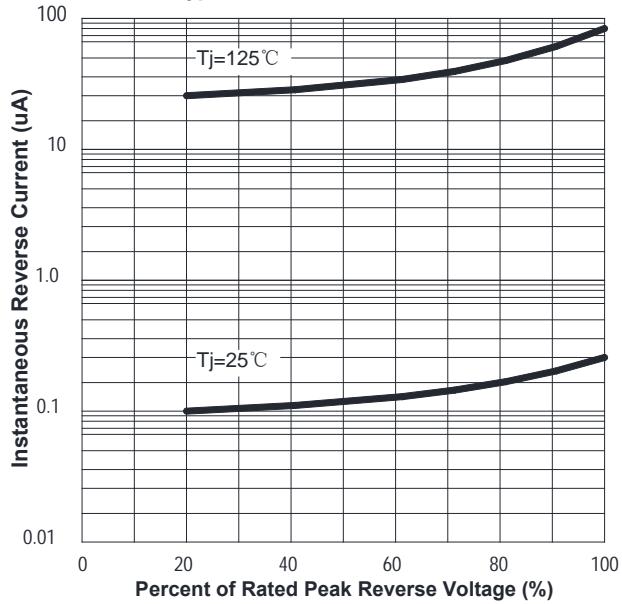


FIG.5 Diagram of circuit and Testing wave form of reverse recovery time

