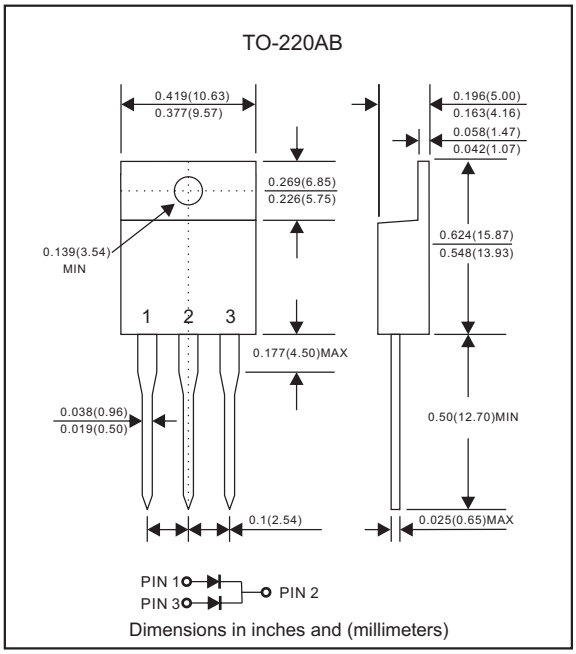
MUR1020CT THRU MUR1060CT

10A Super Fast Recovery Rectifiers - 200V-600V

Features

- Dual rectifier construction, positive centetap, offer 5.0A Half wave and 10.0A full wave rectification.
- High surge current capability.
- Super fast recovery time for switching mode application.
- Low power loss.
- Glass passivated chip junctions.
- Lead-free parts meet environmental standards of MIL-STD-19500/228

Package outline



Mechanical data

- Epoxy : UL94-V0 rated flame retardant
- Case : JEDEC TO-220AB molded plastic body over passivated chip
- Lead : Axial leads, solderable per MIL-STD-202, Method 208 guranteed
- Polarity: As marked
- Mounting Position : Any
- Weight : Approximated 2.10 gram

Maximum ratings (AT T_A=25°C unless otherwise noted)

PARAMETER	SYMBOLS	MUR1020CT	MUR1040CT	MUR1060CT	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	V
Maximum RMS voltage	V_{RMS}	140	280	420	V
Maximum DC blocking voltage	V_{DC}	200	400	600	V
Maximum average forward rectified current	I_O	10			A
Peak forward surge current 8.3ms single half sine-wave(JEDEC method)	I_{FSM}	100			A
Operating junction temperature range	T_J	-55 to +150			°C
Storage temperature range	T_{STG}	-65 to +175			°C

Electrical Characteristics (AT T_A=25°C unless otherwise noted)

PARAMETER	SYMBOLS	MUR1020CT	MUR1040CT	MUR1060CT	UNIT
Maximum forward voltage per leg at IF=5.0A	V_F	0.98	1.30	1.70	V
Maximum reverse recovery time per leg (Note 1)	trr	25	50		ns
Maximum DC reverse current at TJ =25°C at rated DC blocking voltage per leg at TJ =125°C	I_R	10 500			uA uA

Thermal Characteristics

PARAMETER	SYMBOLS	MUR1020CT	MUR1040CT	MUR1060CT	UNIT
Typical thermal resistance junction to case per leg	$R_{\theta JC}$	2.5			°C/W

Note 1: Reverse recovery time test condition, I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

MUR1020CT THRU MUR1060CT

10A Super Fast Recovery Rectifiers - 200V-600V

Rating and characteristic curves(MUR1020CT THRU MUR1060CT)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

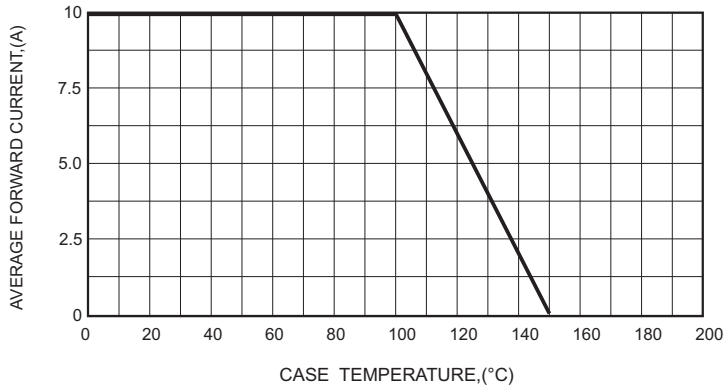


FIG.2-TYPICAL FORWARD CHARACTERISTICS

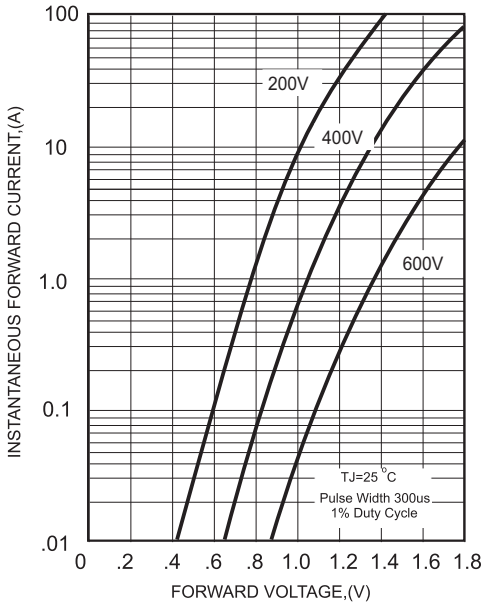


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

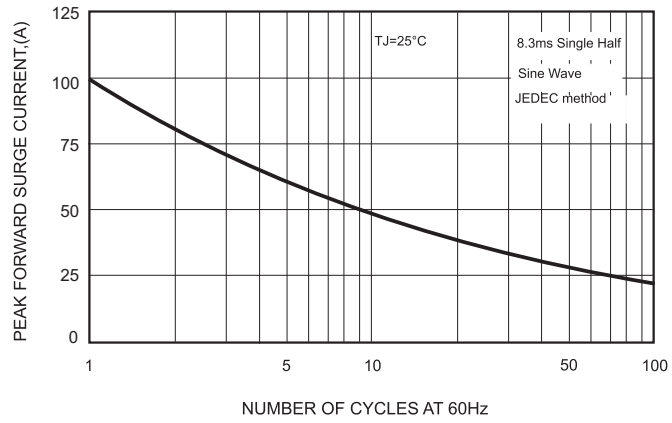


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

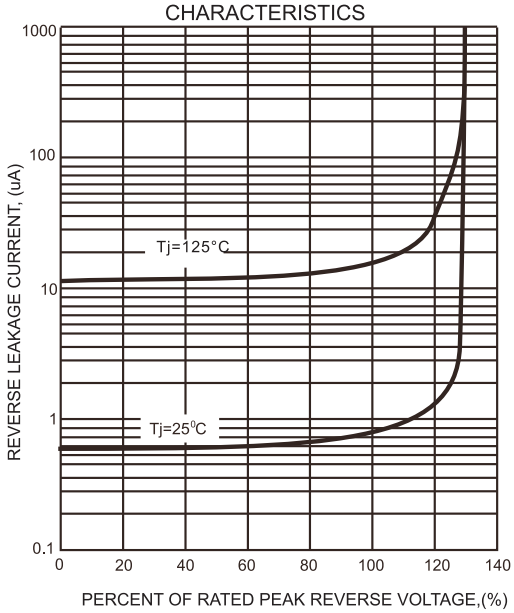
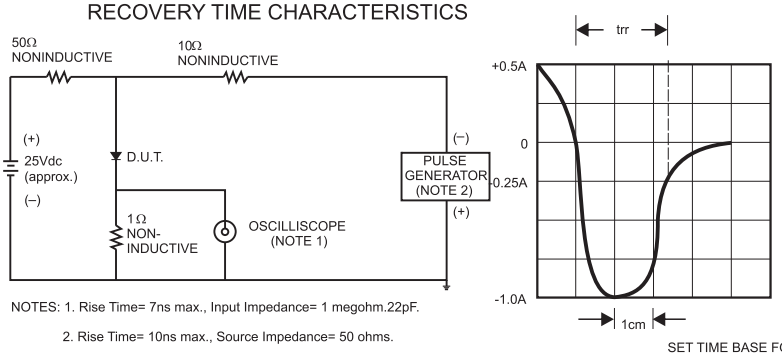


FIG.5- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



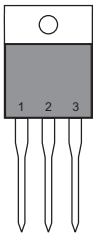
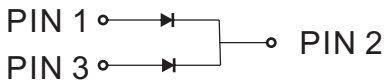
NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

MUR1020CT THRU MUR1060CT

10A Super Fast Recovery Rectifiers - 200V-600V

Pinning information

Pin	Simplified outline	Symbol
Pin1 anode Pin2 cathode Pin3 anode		

Marking

Type number	Marking code
MUR1020CT	MUR1020CT
MUR1040CT	MUR1040CT
MUR1060CT	MUR1060CT

Tube packing

PACKAGE	TUBE (pcs)	TUBE SIZE (m/m)	BOX (pcs)	INNER BOX (m/m)	CARTON SIZE (m/m)	CARTON (pcs)	APPROX. GROSS WEIGHT (kg)
TO-220AB	50	525*32*7.5	1,000	555*150*40	580*230*175	5,000	15.0