

Pb Free Plating Product

MURF1020CT/MURF1040CT/MURF1060CT



10 Ampere Insulated Common Cathode Fast Recovery Half Bridge Rectifiers

Features

- ★ Latest GPP technology with super fast recovery time
- ★ Low forward voltage drop
- ★ High current capability
- ★ Low reverse leakage current
- ★ High surge current capability

Application

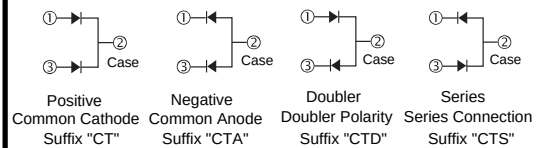
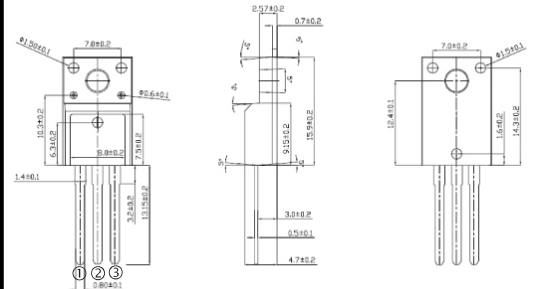
- ★ Automotive Inverters and Solar Inverters
- ★ Plating Power Supply, SMPS, Motor Control and UPS
- ★ Car Audio Amplifiers and Sound Device Systems

Mechanical Data

- * Case: Fully Isolated Molding TO-220FP
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solderable per MIL-STD-202 method 208
- * Polarity: As marked on diode body
- * Mounting position: Any
- * Weight: 2.0 gram approximately

ITO-220AB

Unit:mm



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	SYMBOL	MURF1020CT	MURF1040CT	MURF1060CT	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	200	400	600	V
Maximum RMS Voltage	VRMS	140	280	420	V
Maximum DC Blocking Voltage	VDC	200	400	600	V
Maximum Average Forward Rectified Current Tc=100°C	IF(AV)	10.0			A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	100			A
Maximum Instantaneous Forward Voltage @ 5.0 A	VF	0.98	1.3	1.7	V
Maximum DC Reverse Current @TJ=25°C At Rated DC Blocking Voltage @TJ=125°C	IR	10.0 250			uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	35			nS
Typical junction Capacitance (Note 2)	CJ	65			pF
Typical Thermal Resistance (Note 3)	RθJC	2.2			°C/W
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to +150			°C

NOTES : (1) Reverse recovery test conditions $I_F = 0.5A$, $I_R = 1.0A$, $I_{rr} = 0.25A$.
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.
(3) Thermal Resistance junction to case.

FIG.1 - FORWARD CURRENT DERATING CURVE

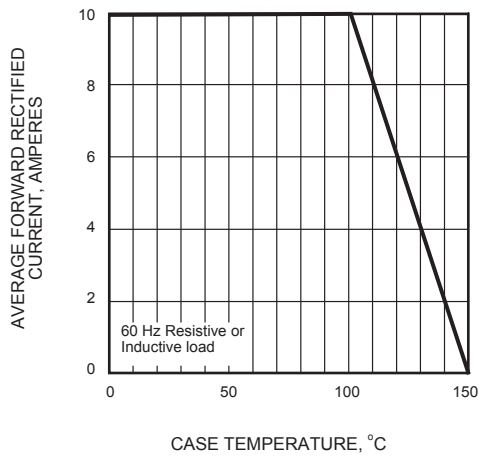


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

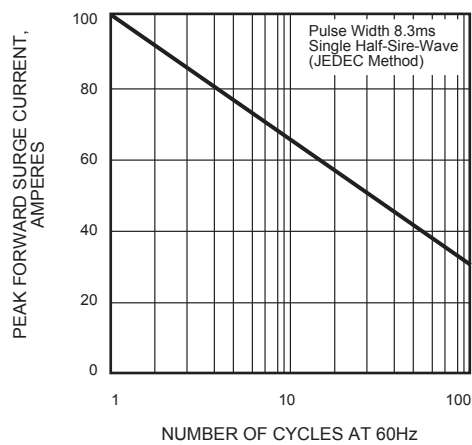


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

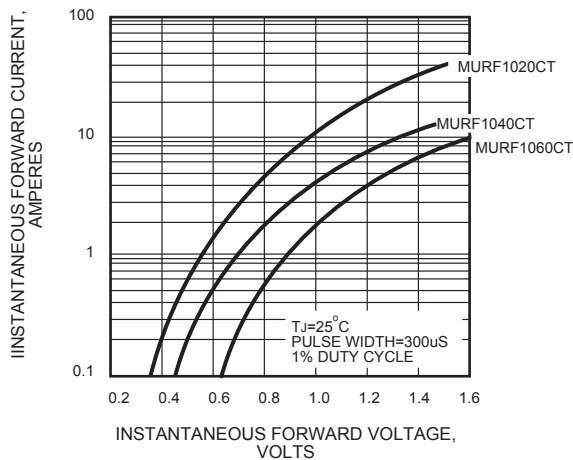


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

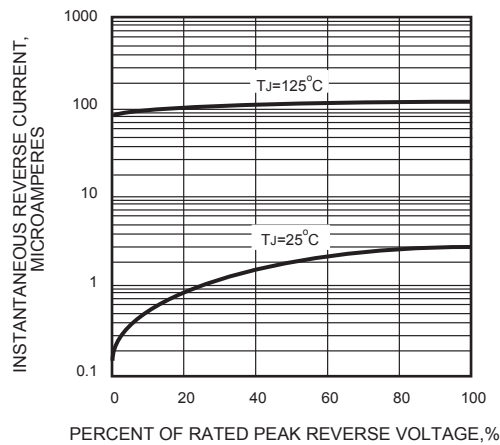


FIG.5 - TYPICAL JUNCTION CAPACITANCE

