

MUR1010FCT THRU MUR1060FCT

10.0 A Switchmode Power Rectifiers



FEATURES

- * Low forward voltage drop
- * High current capability
- * High reliability
- * Low Power Loss, High Efficiency
- * Ultrafast 35 and 60 Nanosecond Recovery times

MECHANICAL DATA

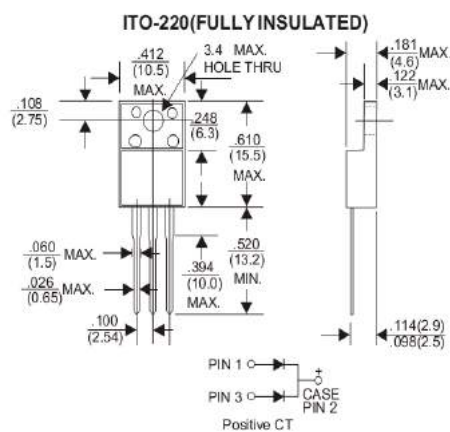
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 1.98 grams

VOLTAGE RANGE

100 to 600 Volts

CURRENT

10.0 Ampere



Maximum Ratings and Electrical Characteristics

- * Rating at 25 °C ambient temperature unless otherwise specified.
- * Single phase, half wave, 60 Hz, resistive or inductive load.
- * For capacitive load, derate current by 20%

Type Number	Symbol	MUR 1010FCT	MUR 1020FCT	MUR 1040FCT	MUR 1060FCT	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	100	200	400	600	V
Maximum RMS Voltage	VRMS	70	140	280	420	V
Maximum DC Blocking Voltage	VDC	100	200	400	600	V
Maximum Average Forward Rectified Current	IF	10				A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	IFSM	80				A
Maximum Instantaneous Forward Voltage @5A	VF	1.0		1.3	1.7	v
Maximum Reverse Current @ Rated VR TA=25 °C TA=125°C	IR	10 500				uA
Typical Junction Capacitance (Note 1)	Cj	150				pF
Typical Thermal Resistance(Note 2)	RθJA	30				°C/w
Operating and Storage Temperature Range	TJ	-65~+150				°C
Maximum reverse recovery time (Note 3)	Trr	50				nS

NOTE1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

NOTE2. Leads maintained at ambient temperature at a distance of 9.5mm from the case

NOTE3. Measured with IF = 0.5A, IR = 1.0A, IRR = 0.25A. See figure 5.

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RATINGS AND CHARACTERISTIC CURVES (MUR1010FCT THRU MUR1060FCT)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

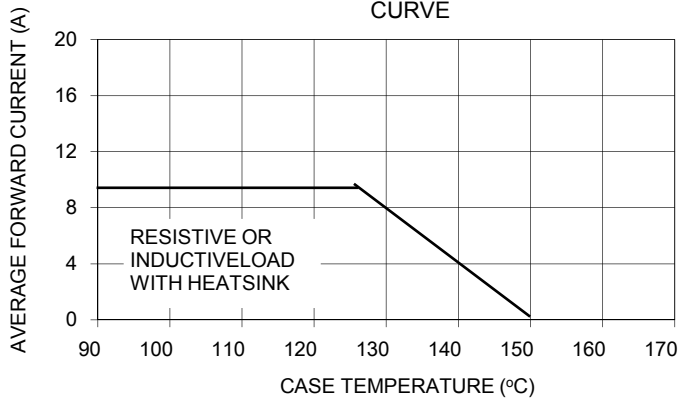


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

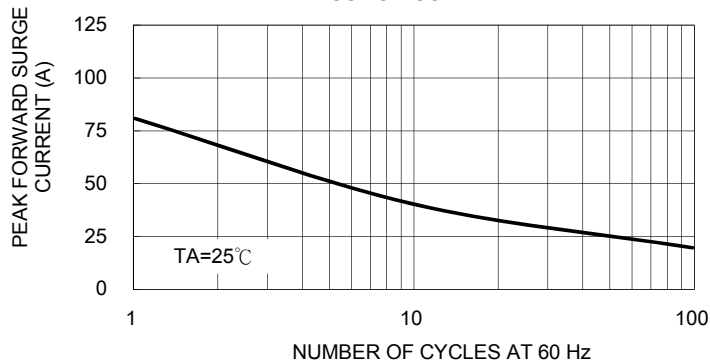


FIG. 5 TYPICAL JUNCTION CAPACITANCE

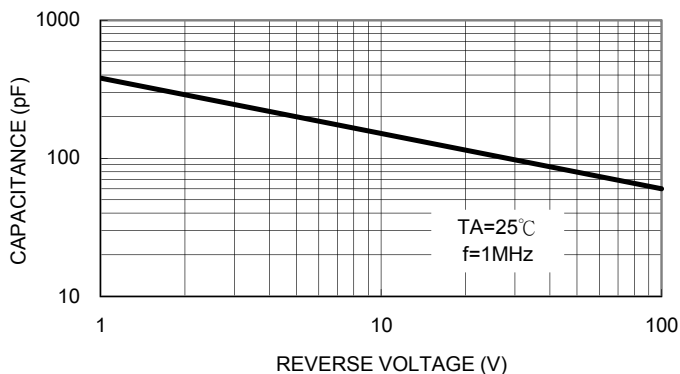


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

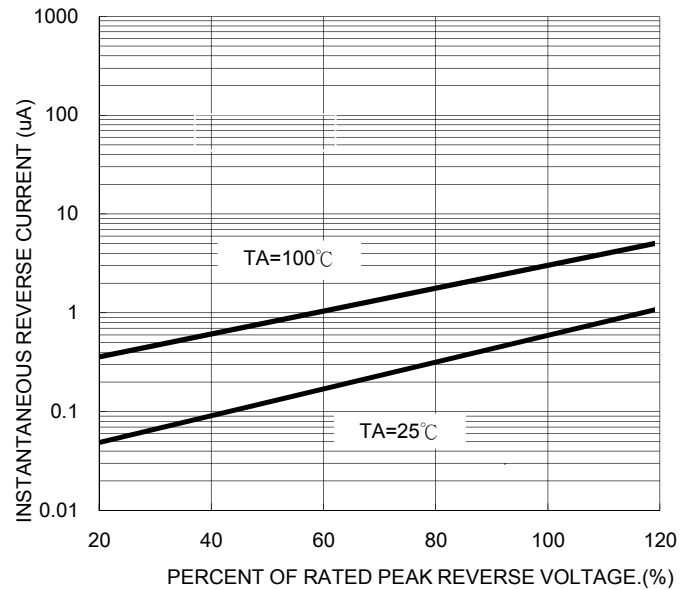


FIG. 3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

