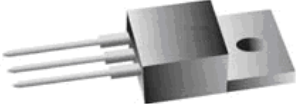
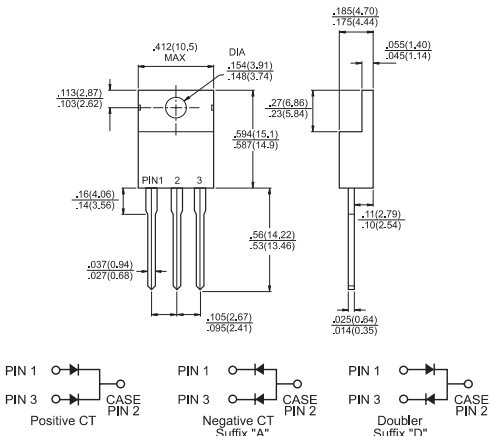


MUR1620CT THRU MUR1660CT

16.0 AMPS. Switchmode Power Rectifiers



	Voltage Range 200 to 600 Volts Current 16.0 Ampere
Features ✧ Ultrafast 35 and 60 Nanosecond Recovery times ✧ 175°C Operating Junction Temperature ✧ Popular TO-220 Package ✧ Epoxy meets UL94, V₀ @ 1/8" ✧ High temperature glass passivated junction ✧ High voltage capability to 600 volts ✧ Low leakage specified @ 150°C case temperature ✧ Current derating @ both case and ambient temperatures Mechanical Data ✧ Case: Epoxy, molded ✧ Lead temperature for soldering purposes: 260°C Max. for 10 seconds ✧ Finish: all external surfaces corrosion resistant and terminal leads are readily solderable ✧ Shipped 50 units per plastic tube ✧ Weight: 1.9 grams (approximately)	TO-220  Dimensions in inches and (millimeters)

MAXIMUM RATINGS

Type Number	Symbol	MUR 1620CT	MUR 1640CT	MUR 1660CT	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	200	400	600	V
Average Rectified Forward Current Per Leg Total Device, (Rated V_R), $T_c=150^\circ\text{C}$ Total Device	$I_{F(AV)}$	8.0 16			A
Peak Rectified Forward Current (Rated V_R , Square Wave, 20 KHz), $T_c=150^\circ\text{C}$ Per Diode Leg	I_{FM}	16			A
Nonrepetitive Peak Surge Current (Surge Applied at Rated Load Conditions Halfwave, Single Phase, 60 Hz)	I_{FSM}	100			A
Operating Junction Temperature and Storage Temperature	T_J, T_{STG}	-65 to +175			°C

THERMAL CHARACTERISTICS, PER DIODE LEG

Maximum Thermal Resistance, Junction to Case	$R\theta_{JC}$	3.0	2.0	°C/W
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ELECTRICAL CHARACTERISTICS, PER DIODE LEG

Maximum Instantaneous Forward Voltage (Note 1) (IF=8.0 Amps, Tc=25°C) (IF=8.0 Amps, Tc=150°C)	V _F	0.975 0.895	1.30 1.300	1.50 1.20	V
Maximum Instantaneous Reverse Current at Rated DC Blocking Voltage @ T _A =25°C @ T _A =125°C	I _R	5.0 250	10 500		uA uA
Maximum Reverse Recovery Time (IF=0.5 Amp. IR=1.0 Amp. IREC=0.25 Amp)	T _{rr}	25	50		nS

Note: 1. Pulse Test: Pulse Width = 300 us, Duty Cycle $\leq 2.0\%$.

FIG.1- CURRENT DERATING, CASE, PER LEG

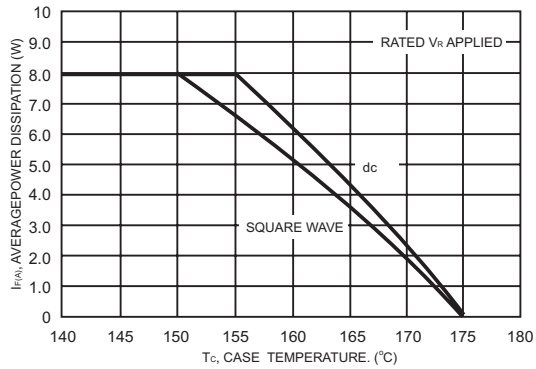
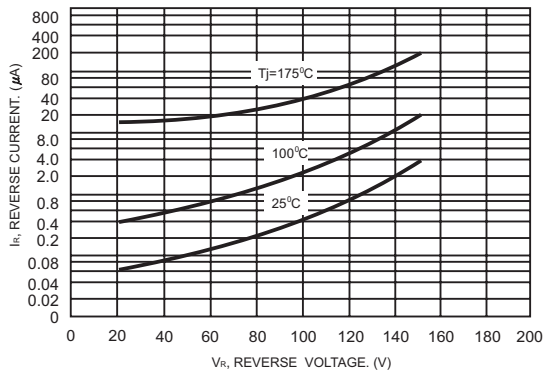


FIG.2- TYPICAL REVERSE CURRENT, PER LEG



*The curves shown are typical for highest voltage device in the voltage grouping. Typical reverse current for lower voltage selections can be estimated from these same curves if V_R is sufficiently below rated V_R .

FIG.4- TYPICAL CAPACITANCE, PER LEG

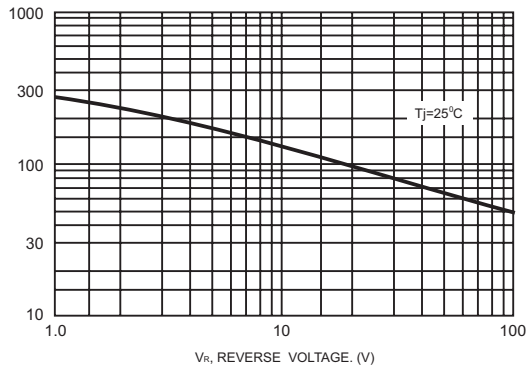


FIG.3- TYPICAL FORWARD VOLTAGE, PER LEG

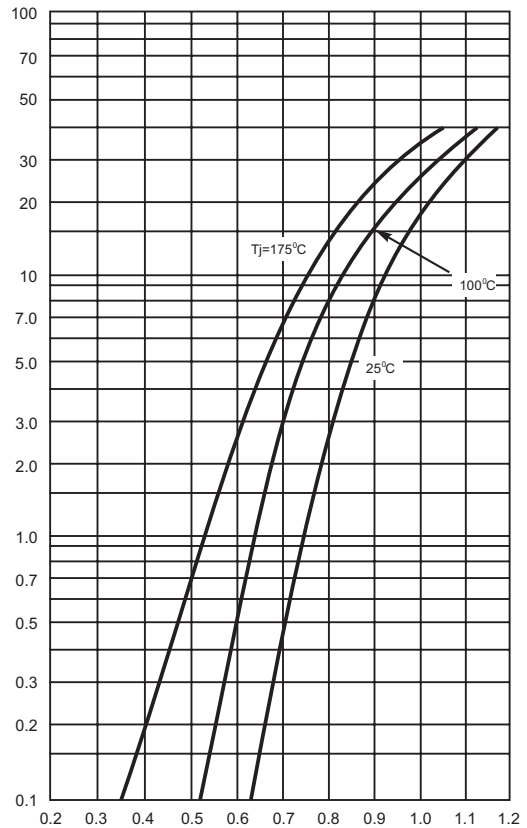


FIG.5- CURRENT DERATING, AMBIENT, PER LEG

