

SUPER FAST RECTIFIERS

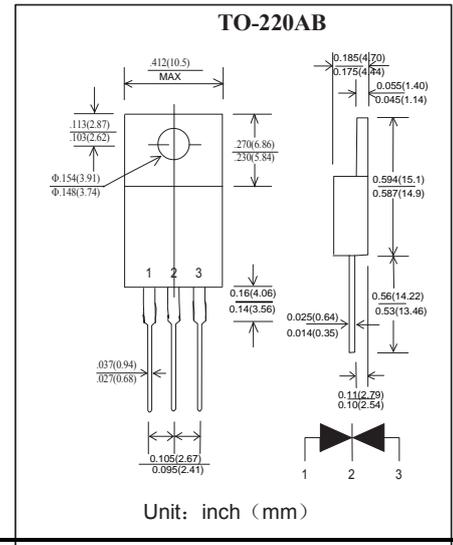
VOLTAGE RANGE: 100--- 600 V CURRENT:8.0 A

Features

- High Current Capability
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency

Mechanical Data

- Case: Molded Plastic
- Polarity: Symbols molded or marked on body
- Mounting Position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

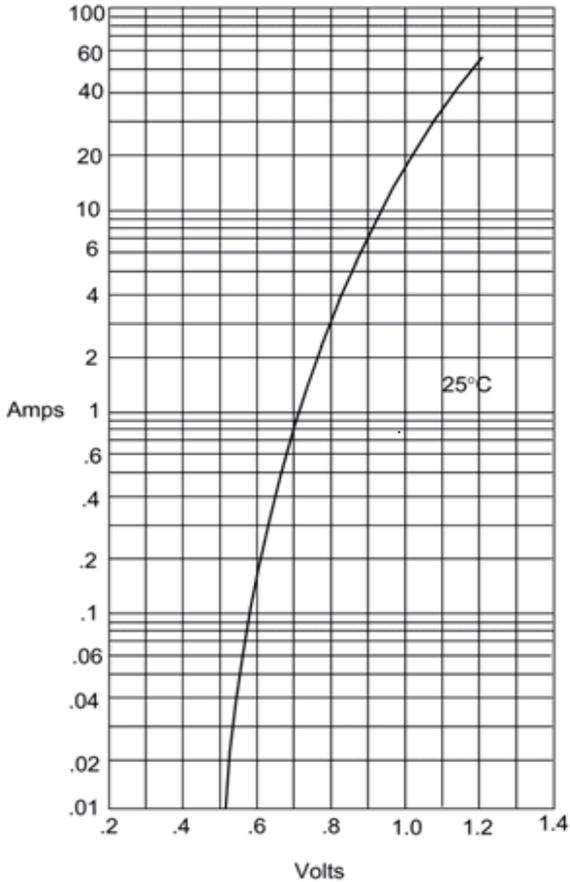
@ 25°C Ambient Temperature (unless otherwise noted)Single phase

	Symbols	MUR1610CT	MUR1620CT	MUR1640CT	MUR1660CT	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	100V	200V	400V	600V	V
Maximum RMS voltage	V_{RMS}	70V	140V	280V	420V	V
Maximum DC blocking voltage	V_{DC}	100V	200V	400V	600V	V
Maximum average forward rectified current	$I_{F(AV)}$	8				A
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	125				A
Maximum peak reverse current full cycle @TA = 75°C	$I_{R(AV)}$	10				uA
Typical thermal resistance	$R_{\theta JA}$	30				K/W
Operating junction and storage temperature range	T_J, T_{STG}	-50 --- +150				°C

	Symbols	MUR1010CT /MUR1020CT	MUR1040CT	MUR1060CT	Unit
Maximum forward voltage $I_F = 5A, T_C = 25^\circ C$	V_F	1.0	1.3	1.7	V
Maximum reverse current TA= 25°C TA=100°C	I_R		10 500		uA
Type junction capacitance VR = 4.0V, f = 1MHz	C_j		150		pF
Maximum reverse recovery time at IF =0.5A, IR =1.0A, Irr =0.25A	T_{RR}		35		ns

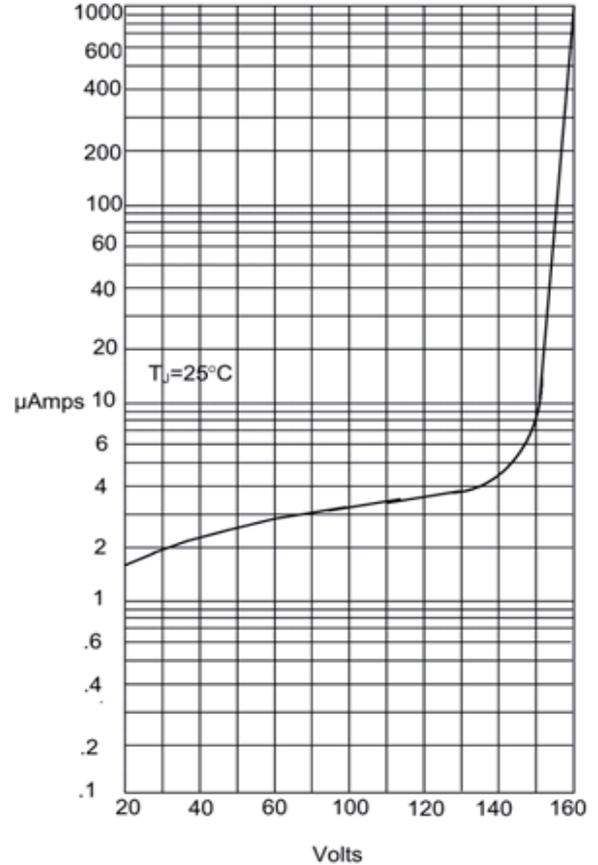
RATINGS AND CHARACTERISTIC CURVES

Figure 1
Typical Forward Characteristics



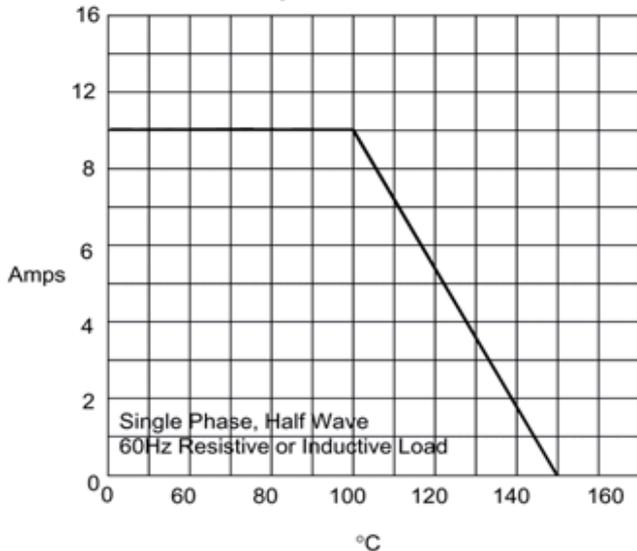
Instantaneous Forward Current - Amperes *versus* Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



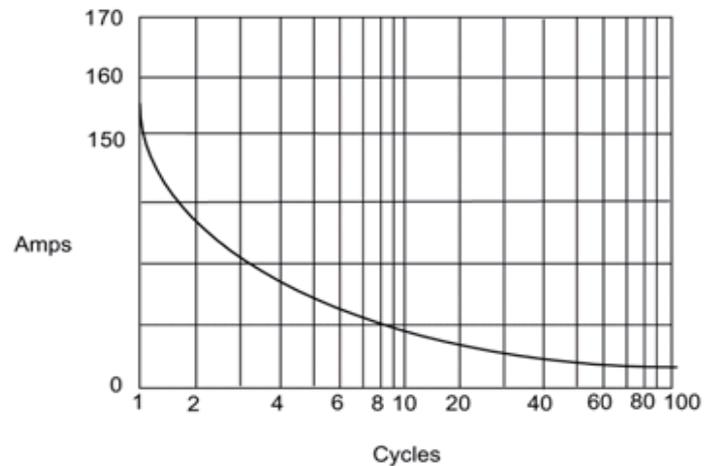
Instantaneous Reverse Leakage Current - MicroAmperes *versus* Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus* Case Temperature - °C

Figure 4
Maximum Non-Repetitive Forward Surge Current



Peak Forward Surge Current - Amperes *versus* Number Of Cycles At 60Hz - Cycles