

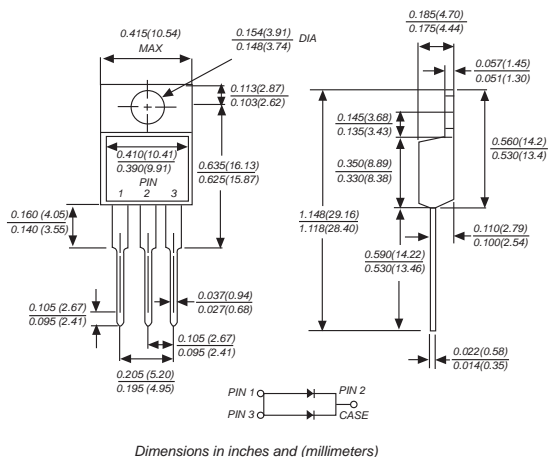


# MUR1610CT THRU MUR1660CT

## ULTRAFAST RECOVERY RECTIFIERS

Reverse Voltage - 100 to 600 Volts Forward Current - 16 Amperes

### TO-220AB



### FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Construction utilizes void-free molded plastic technique
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C, 0.25" (6.35mm) from case for 10 seconds

### MECHANICAL DATA

**Case:** TO-220AB molded plastic body  
**Terminals:** Leads solderable per MIL-STD-750, Method 2026  
**Polarity:** As marked  
**Mounting Position:** Any  
**Weight:** 0.080 ounce, 2.24 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

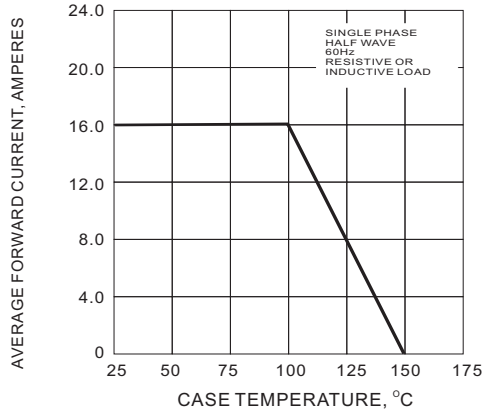
Ratings at 25°C ambient temperature unless otherwise specified.  
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

MDD Catalog Number	SYMBOLS	MUR 1610CT	MUR 1620CT	MUR 1630CT	MUR 1640CT	MUR 1650CT	MUR 1660CT	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	100	200	300	400	500	600	VOLTS
Maximum RMS voltage	$V_{RMS}$	70	140	210	280	350	420	VOLTS
Maximum DC blocking voltage	$V_{DC}$	100	200	300	400	500	600	VOLTS
Maximum average forward rectified current (see fig. 1)	$I_{(AV)}$	16						Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	90						Amps
Maximum instantaneous forward voltage at 8A	$V_F$	1		1.3		1.7		Volts
Maximum DC reverse current at rated DC blocking voltage	$I_R$			10				$T_A=25^\circ C$ $T_A=125^\circ C$ uA
Typical junction capacitance	$C_J$			170		130		pF
Maximum thermal resistance (NOTE 2)	$R_{\theta JC}$			3.5				°C/W
Maximum Reverse Recovery Time (Note 1)	$T_{rr}$			35				nS
Operating Junction and Storage temperature range	$T_J, T_{STG}$	-55 to +150						°C

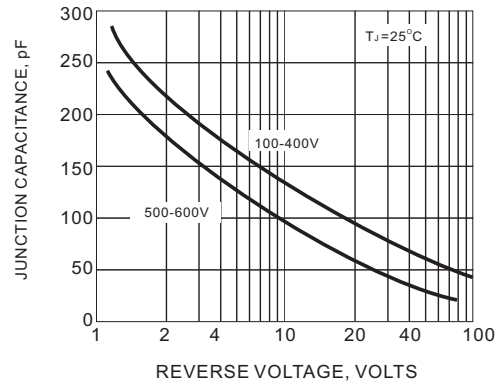
**Note:** 1. Reverse Recovery Test Conditions:  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{rr}=0.25A$ .  
 2. Thermal resistance from Junction to ambient and from junction to lead 0.375" (9.5mm) P.C.B mounted



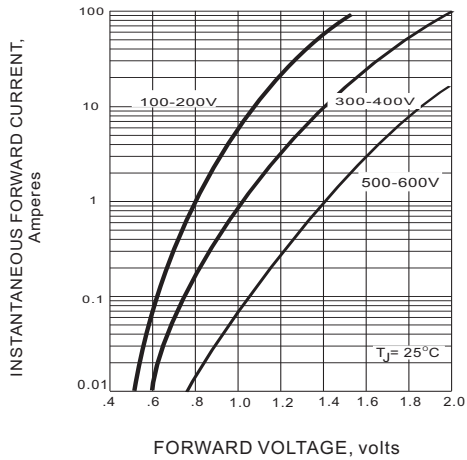
# RATINGS AND CHARACTERISTIC CURVES MUR1610CT THRU MUR1660CT



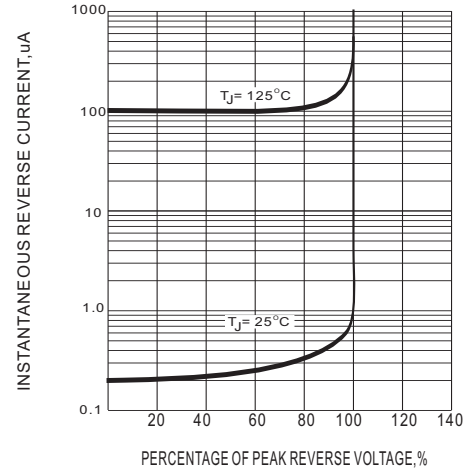
**Fig.1 FORWARD CURRENT DERATING CURVE**



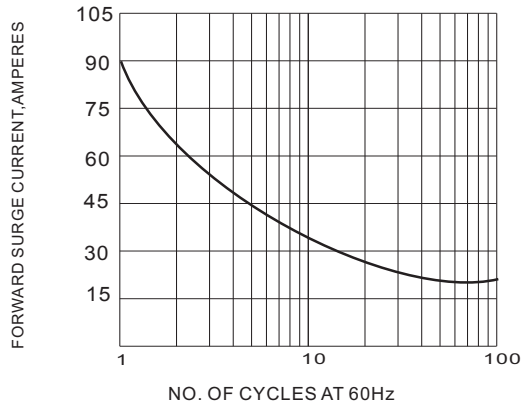
**Fig.2 TYPICAL JUNCTION CAPACITANCES**



**Fig.3 FORWARD CHARACTERISTICS**



**Fig.4 TYPICAL REVERSE CHARACTERISTICS**



**Fig.5 PEAK FORWARD SURGE CURRENT**



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!