



MUR1610CT THRU MUR1660CT

Reverse Voltage - 100 to 600 Volts Forward Current - 16.0 Ampere

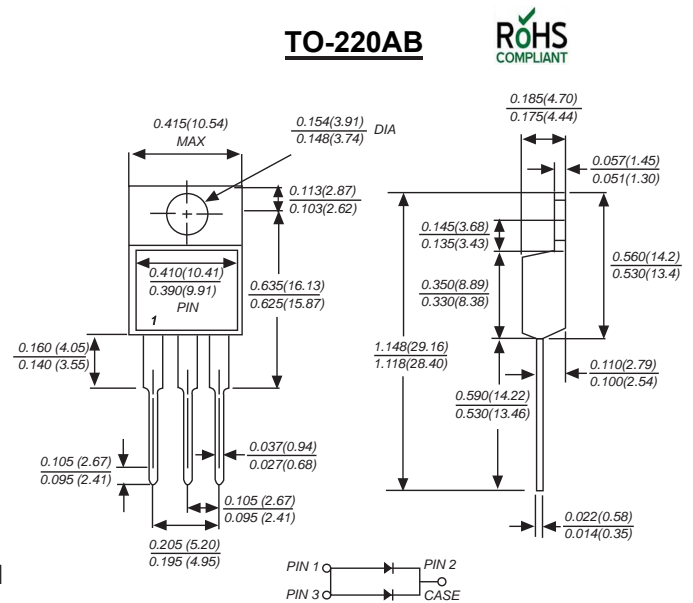
ULTRAFAST RECOVERY RECTIFIER

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 : JEDEC TO-220AB Molded plastic body
Terminals : Solder plated, 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%.

Parameter	SYMBOLS	MUR1610CT	MUR1620CT	MUR1630CT	MUR1640CT	MUR1650CT	MUR1660CT	UNITS
		MDD	MDD	MDD	MDD	MDD	MDD	
Marking Code		MUR1610CT	MUR1620CT	MUR1630CT	MUR1640CT	MUR1650CT	MUR1660CT	
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	300	400	500	600	V
Maximum RMS voltage	V_{RMS}	70	140	210	280	350	420	V
Maximum DC blocking voltage	V_{DC}	100	200	300	400	500	600	V
Maximum average forward rectified current (see fig. 1)	I_{AV}	16.0						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	90						A
Maximum instantaneous forward voltage at 8.0A	V_F	1.0		1.3		1.7		V
Maximum DC reverse current at rated DC blocking voltage	I_R	10						uA
$T_A=25^\circ C$ $T_A=100^\circ C$		500						
Typical junction capacitance (NOTE 1)	C_J	170				130		pF
Typical thermal resistance (NOTE 2)	$R_{\theta JC}$	3.5						°C/W
Maximum Reverse Recovery time (NOTE 3)	T_{rr}	35						nS
storage temperature range	T_{JSTG}	-50 to +150						°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance from junction to case.

3. Reverse Recovery Test Conditions: $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.



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Ratings And Characteristic Curves

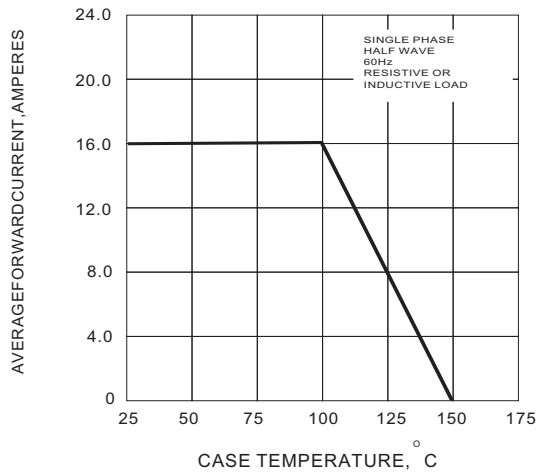


Fig.1 FORWARD CURRENT DERATING CURVE

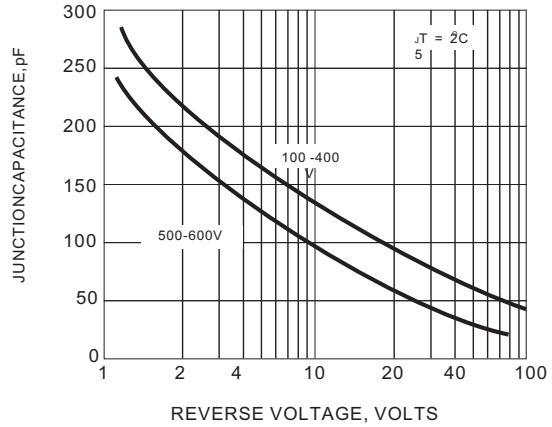


Fig.2 TYPICAL JUNCTION CAPACITANCES

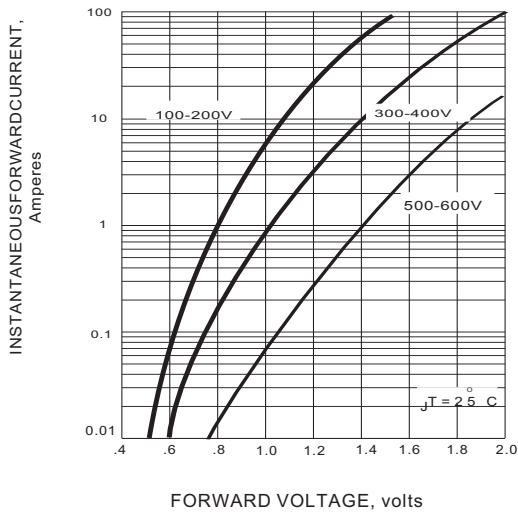


Fig.3 FORWARD CHARACTERISTICS

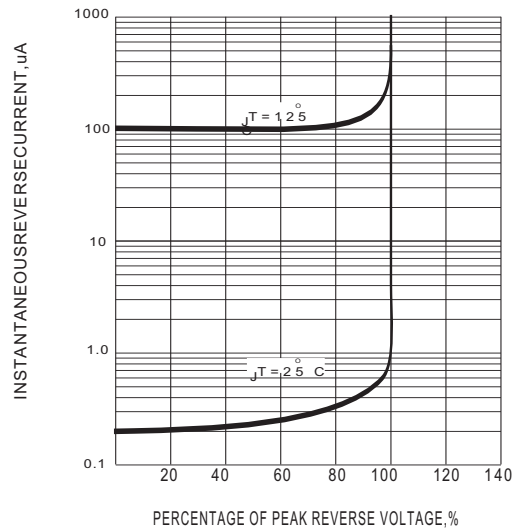


Fig.4 TYPICAL REVERSE CHARACTERISTICS

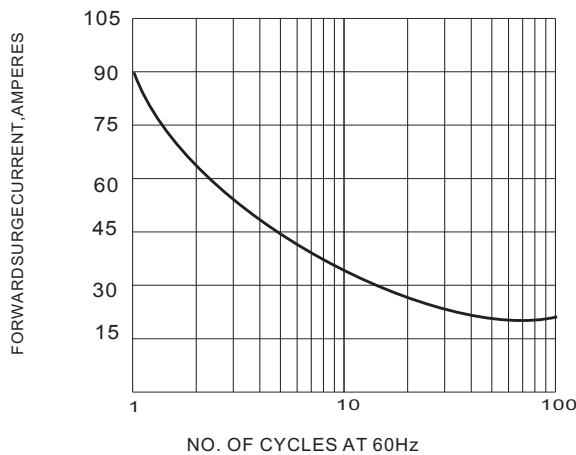


Fig.5 PEAK FORWARD SURGE CURRENT

The curve above is for reference only.