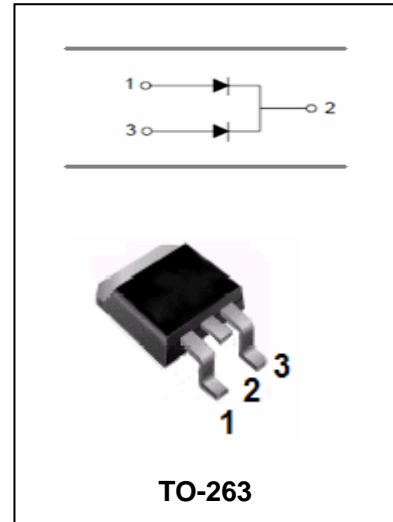


## Ultra Fast Rectifier

## MURB1620CT

### FEATURES

- Low Cost.
- Diffused Junction.
- Low Leakage.
- Low Forward Voltage Drop.
- High Current Capability.
- Easily Cleaned With Alcohol, Isopropanol and Similar Solvents.



### MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MURB1620CT	Unit
$V_{RRM}$	Recurrnt Peak Voltage	200	V
$V_{RMS}$	RMS Voltage	140	V
$V_{DC}$	DC Blocking Voltage	200	V
$I_{F(AV)}$	Average Forward Rectified Current @ $T_A=100^\circ\text{C}$ Per leg Total device	8.0	A
		16	
$I_{FSM}$	Peak Forward Surge Current 8.3ms Single Half-Sine-wave Superimosed on Rated Load	100	A
$R_{\theta JC}$	Typical Thermal Resistance Junction to Case	2.0	$^\circ\text{C/W}$
$T_j T_{stg}$	Operating Junction and Storage Temperature Range	-55 to +175	$^\circ\text{C}$



**Ultra Fast Rectifier**

**MURB1620CT**

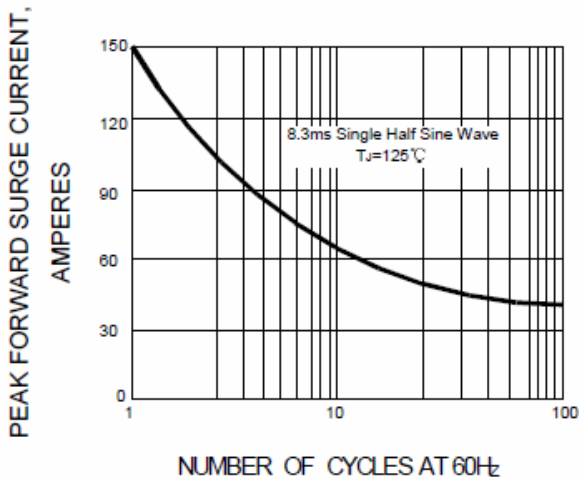
**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Test conditions	MAX	UNIT
			MURB1620CT	
Reverse Current	$I_R$	$V_R=V_{RRM}, T_A=25^\circ\text{C}$ $V_R=V_{RRM}, T_A=150^\circ\text{C}$	5.0 250	$\mu\text{A}$
Forward Voltage	$V_F$ (Note1)	$I_F=8\text{A}, T_A=25^\circ\text{C}$ $I_F=8\text{A}, T_A=150^\circ\text{C}$	0.975 0.895	V
Reverse Recover Time	$t_{rr}$	$I_F=0.5\text{A}, I_R=1\text{A},$ $I_{rr}=0.25\text{A}$	25	ns

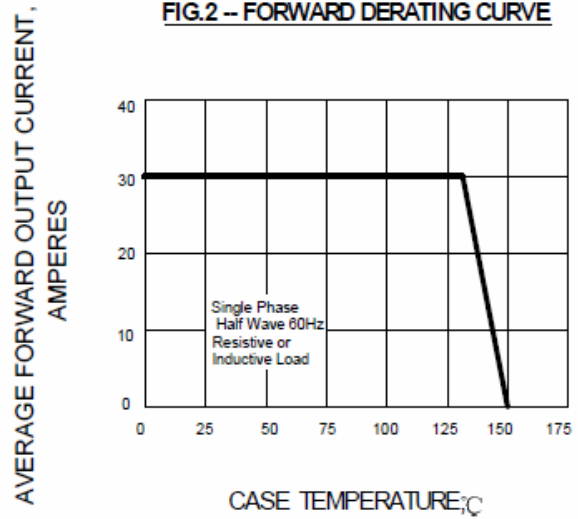
Note1: Pulse test:pulse width=300 $\mu\text{s}$ ,duty cycl $\leq$ 2.0%

**TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

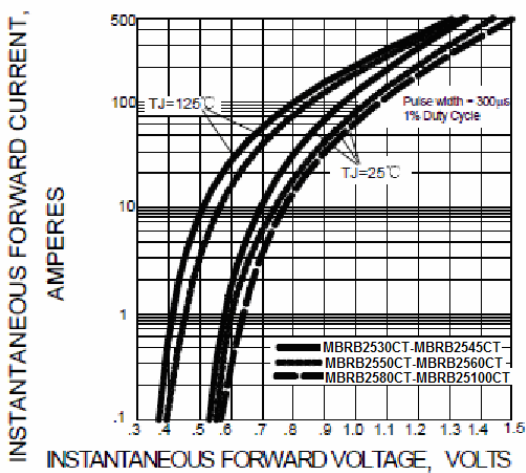
**FIG.1 – PEAK FORWARD SURGE CURRENT**



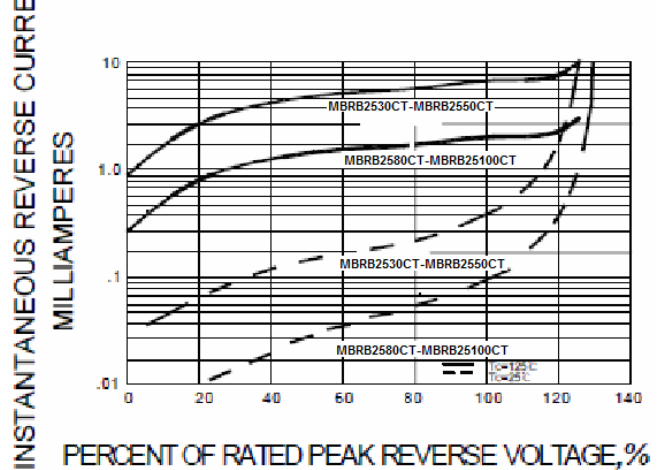
**FIG.2 – FORWARD DERATING CURVE**



**FIG.3 – TYPICAL FORWARD CHARACTERISTIC**



**FIG.4 – TYPICAL REVERSE CHARACTERISTIC**



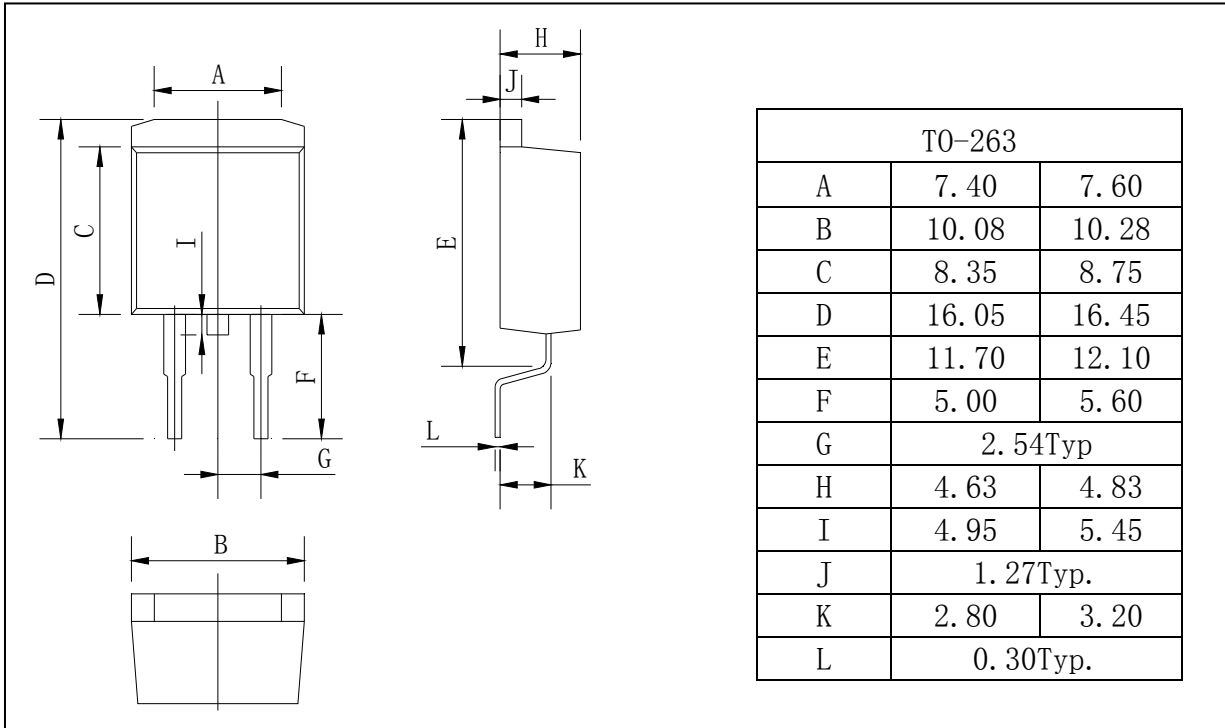
# Ultra Fast Rectifier

# MURB1620CT

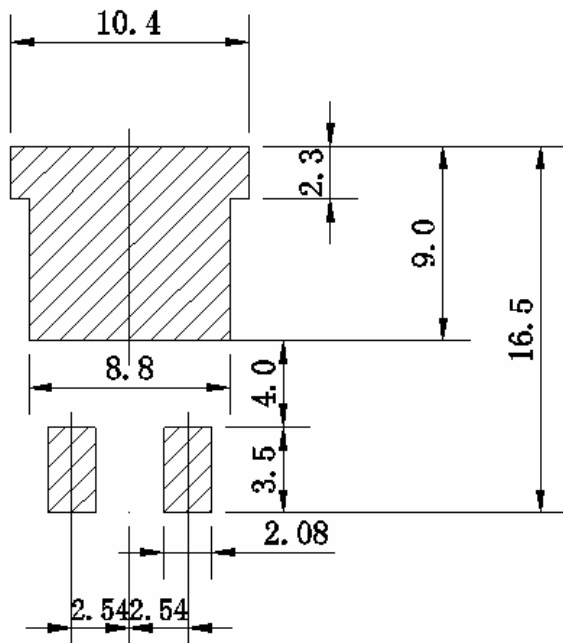
## PACKAGE OUTLINE

Plastic surface mounted package

TO-263



## SOLDERING FOOTPRINT



Unit:mm