



Ultra Fast Rectifier

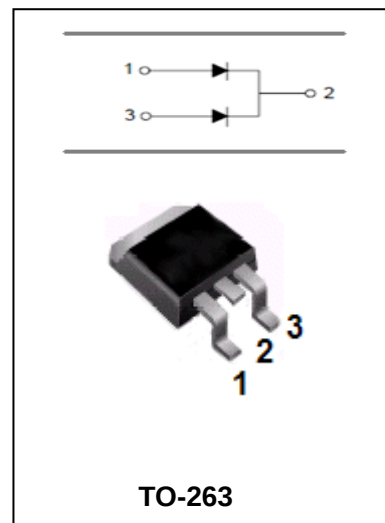
MURB1620CT-MURB1660CT

FEATURES

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



Lead-free



TO-263

MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MURB 1620CT	MURB 1640CT	MURB 1660CT	Unit
V_{RRM}	Recurrnt Peak Voltage	200	400	600	V
V_{RMS}	RMS Voltage	140	280	420	V
V_{DC}	DC Blocking Voltage	200	400	600	V
$I_{F(AV)}$	Average Forward Rectified Current @ $T_A=100^{\circ}C$ Per leg Total device	8.0 16			A
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			$^{\circ}C/W$
T_j T_{stg}	Operating Junction and Storage Temperature Range	-55 to +175			$^{\circ}C$



Ultra Fast Rectifier

MURB1620CT-MURB1660CT

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MAX			UNIT
			MURB 1620CT	MURB 1640CT	MURB 1660CT	
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	10 500		μA
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	1.30 1.00	1.50 1.20	V
Reverse Recover Time	t_{rr}	$I_F=0.5\text{A}, I_R=1\text{A},$ $I_{rr}=0.25\text{A}$	25	50		ns

Note1: Pulse test: pulse width=300 μs , duty cycl $\leq$ 2.0%

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

FIG.1 –TYPICAL FORWARD CHARACTERISTIC

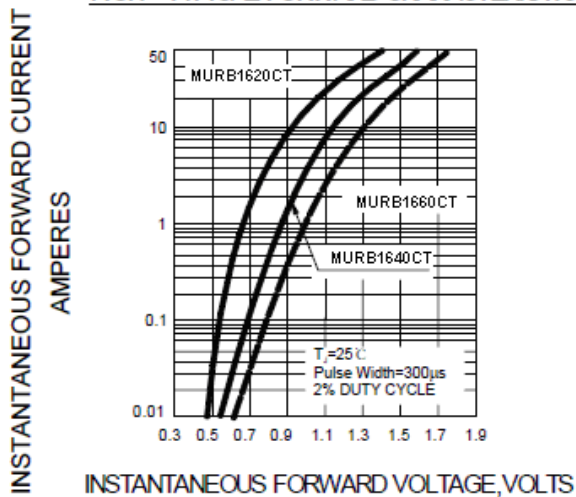


FIG.2 –TYPICAL REVERSE CHARACTERISTICS

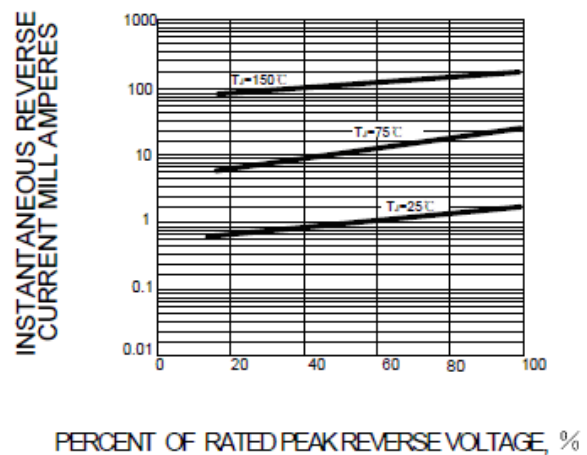


FIG.3 – PEAK FORWARD SURGE CURRENT

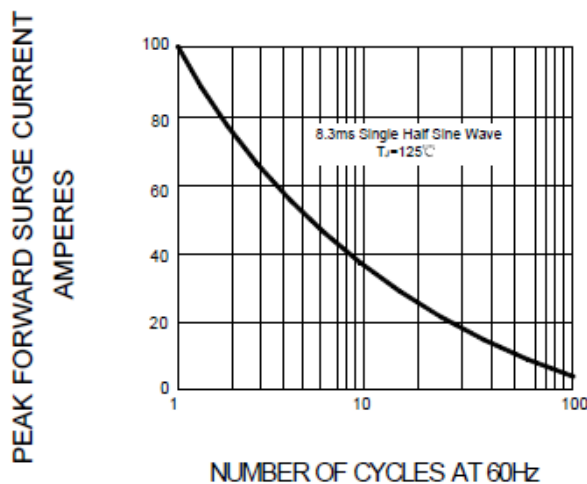
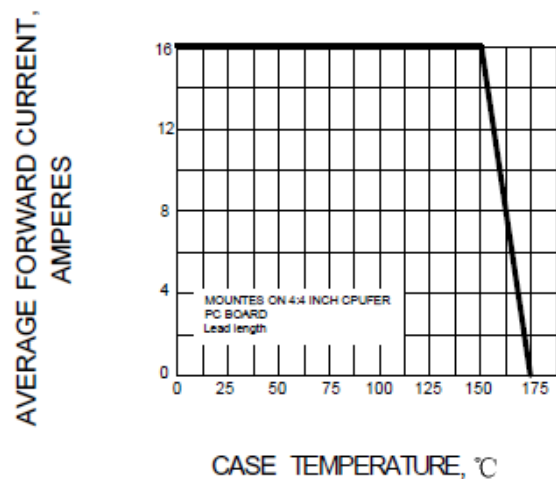


FIG.4 – FORWARD DERATING CURVE





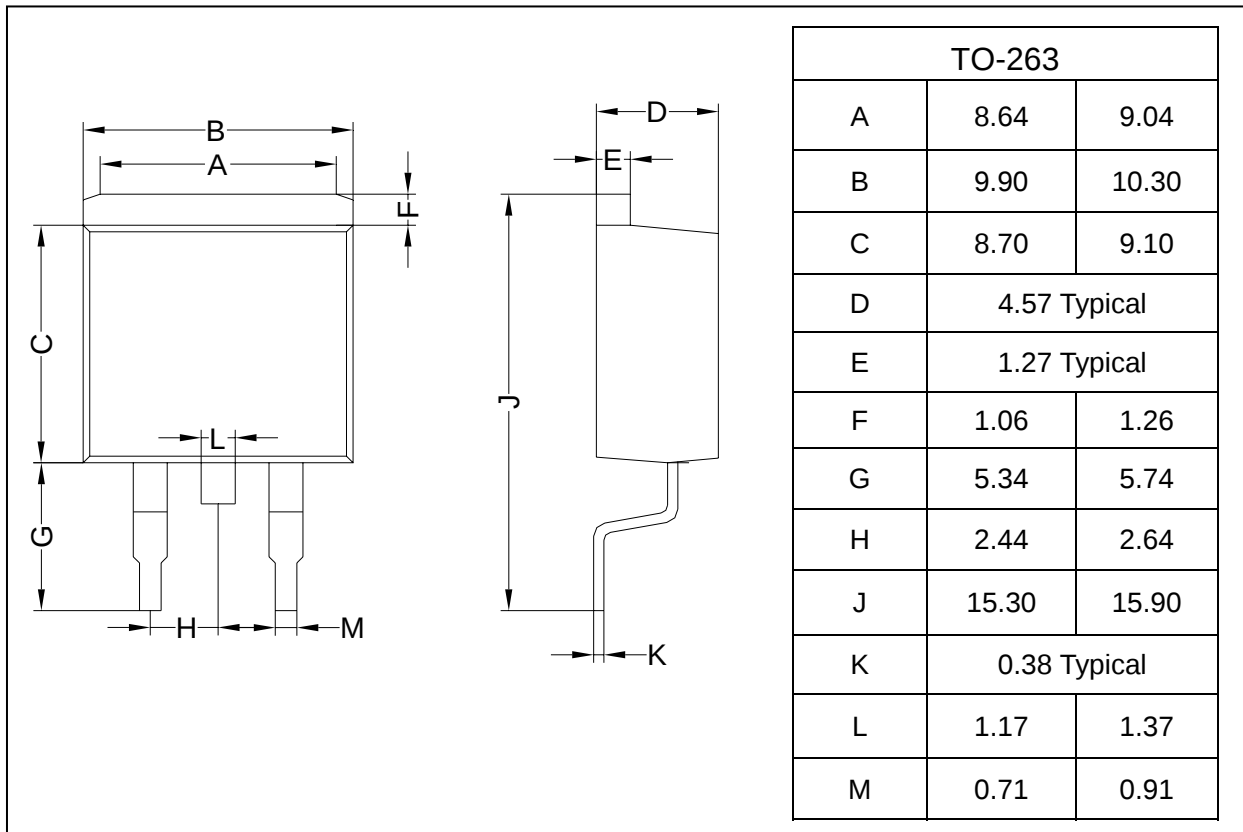
Ultra Fast Rectifier

MURB1620CT-MURB1660CT

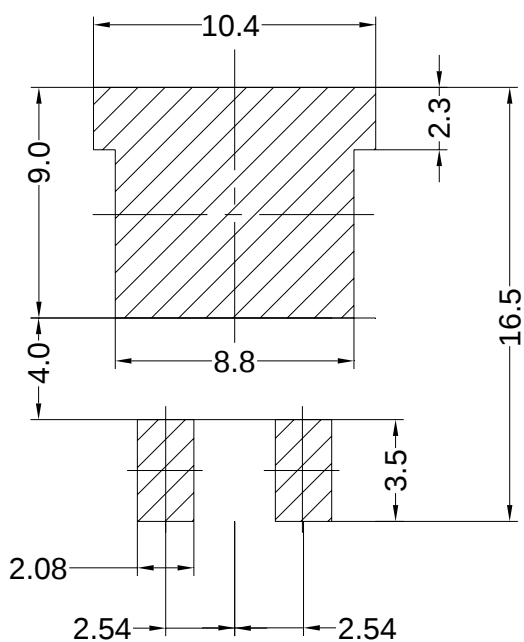
PACKAGE OUTLINE

Plastic surface mounted package

TO-263



SOLDERING FOOTPRINT



Unit:mm