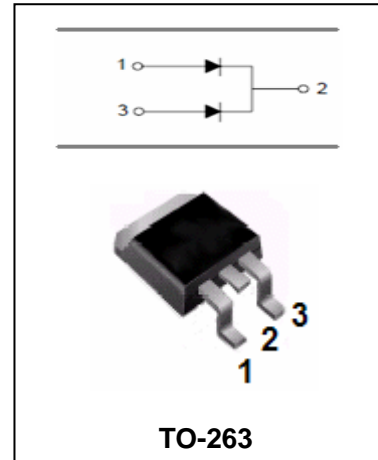


Schottky Barrier Rectifier **MBRB1635CT- MBRB1660CT**

FEATURES

- High Surge Capacity.
- For Use In Low Voltage,High Frequency Inverters, Free Wheeling and Polarity Protection Applications.
- Metal Silicon Junction, Majority Carrier Conduction.
- High Current Capacity, Low Forward Voltage Drop.
- Guard Ring for Over Voltage Protection.



MAXIMUM RATING operating temperature range applies unless otherwise specified

Symbol	Parameter	MBRB 1635CT	MBRB 1645CT	MBRB 1650CT	MBRB 1660CT	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	35	45	50	60	V
V_{RMS}	RMS Voltage	25	32	35	42	V
V_{DC}	DC Blocking Voltage	35	45	50	60	V
$I_{F(AV)}$	Average Forward Rectified Current @ $T_A=125^{\circ}C$	16				A
I_{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave superimposed on rated load	150				A
$R_{\theta JC}$	Thermal Resistance (Note1)	1.5				$^{\circ}C/W$
T_j	Operating Junction Temperature Range	-55 to +150				$^{\circ}C$
T_{stg}	Storage Temperature Range	-55 to +175				$^{\circ}C$

Note:1. Thermal resistance from junction to case.



Schottky Barrier Rectifier MBRB1635CT- MBRB1660CT

ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	Max				UNIT
			MBRB 1635CT	MBRB 1645CT	MBRB 1650CT	MBRB 1660CT	
Reverse Current	I _R	V _{RM} =V _{RRM} , T _A =25°C	0.2		1.0		mA
		V _{RM} =V _{RRM} , T _A =125°C	40		50		
Forward Voltage	V _F (Note1)	I _F =8A, T _A =25°C	0.63		0.75		V
		I _F =8A, T _A =125°C	0.57		0.65		

Note:1.Pulse tesse:300µs pulse width,1% duty cycle.

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

FIG.1 – FORWARD CURRENT DERATING CURVE

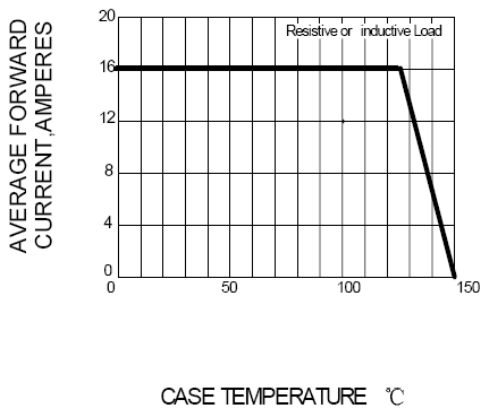


FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

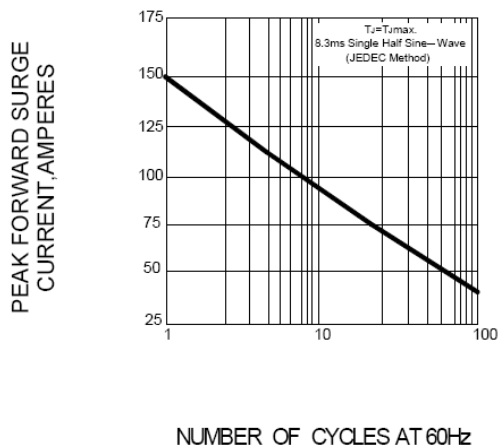


FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC PER LEG

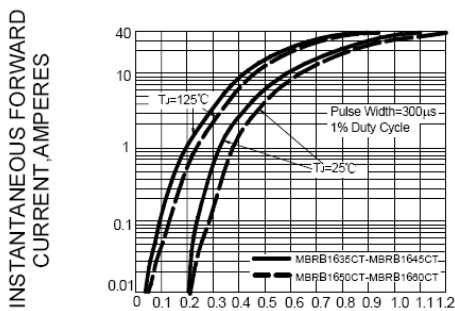
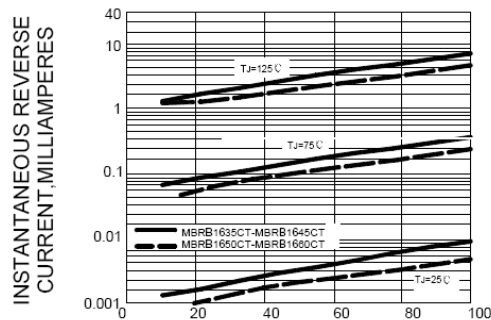


FIG.4 – TYPICAL REVERSE CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

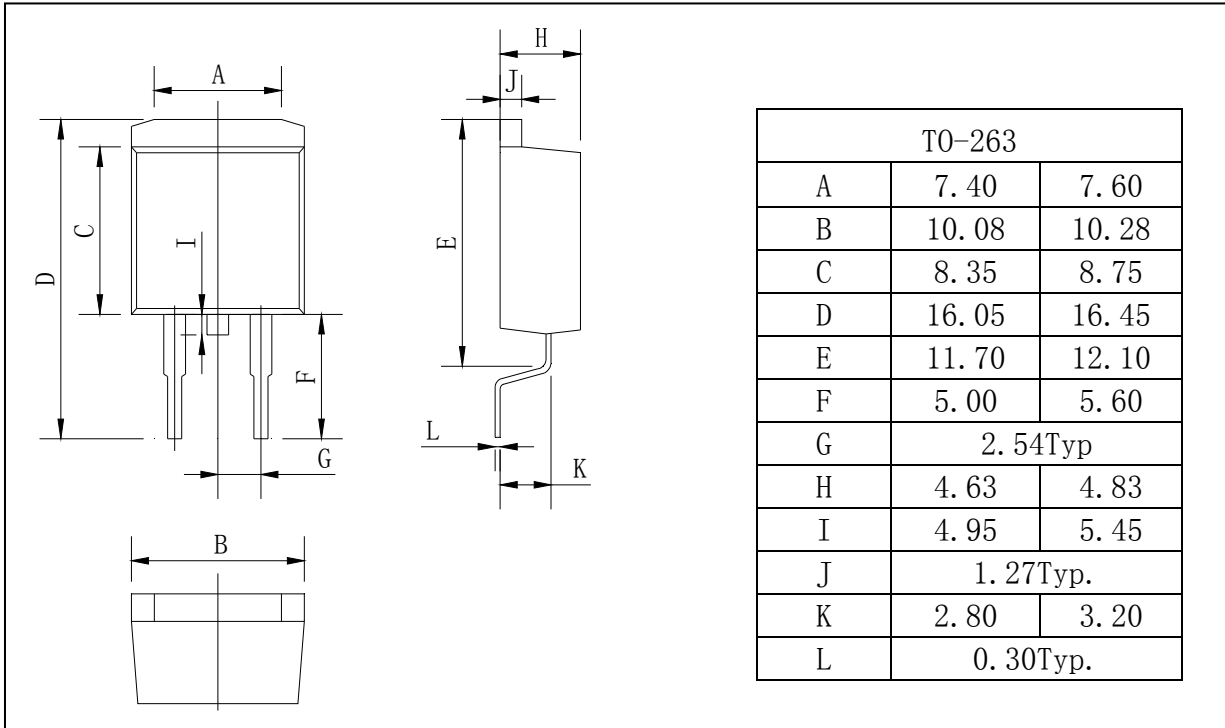
PERCENT OF RATED PEAK REVERSE VOLTAGE, %

Schottky Barrier Rectifier MBRB1635CT- MBRB1660CT

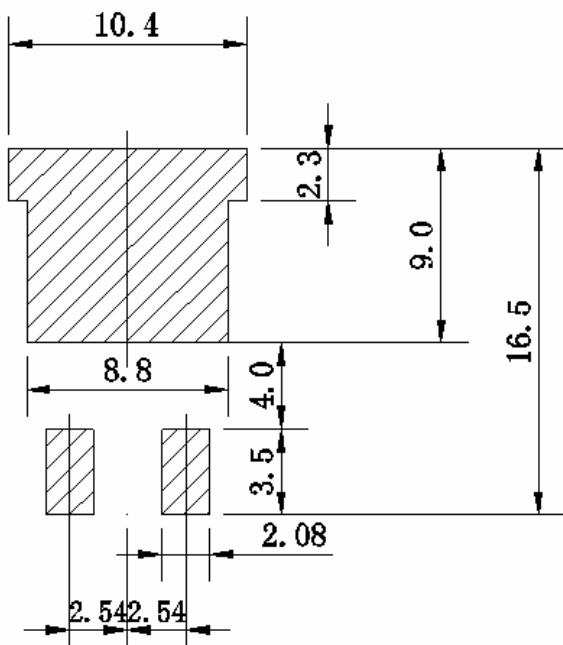
PACKAGE OUTLINE

Plastic surface mounted package

TO-263



SOLDERING FOOTPRINT



Unit:mm