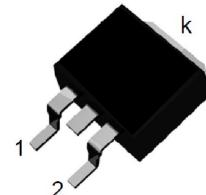


Features

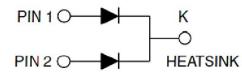
- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Low forward voltage, high efficiency
- Guarding for over voltage protection



Package: TO-263

Mechanical Data

- Case: epoxy, molded
- Weight: 1.4grams (approximately)
- Lead temperature for soldering purpose: 260°C max. for 10 sec
- 800 pcs/reel



Schematic Diagram

Maximum Ratings & Electrical Characteristics

($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Test Conditions		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage			V_{RRM}	60	V
Working Peak Reverse Voltage			V_{RWM}	60	V
Maximum DC Blocking Voltage			V_{DC}	60	V
Maximum Average Forward Rectified Current @ $T_c=105^\circ\text{C}$	Total Device Per Diode		$I_{F(AV)}$	20 10	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load per Diode			I_{FSM}	150	A
Peak repetitive Reverse Current Per Leg at $t_p=2.0\mu\text{s}$, 1KHz			I_{RRM}	1.0	A
Voltage Rate of Change (rated V_R)			Dv/dt	10000	V/ μs
Operating Junction Temperature Range			T_J	- 55 to +150	°C
Storage Temperature Range			T_{STG}	- 55 to +150	°C
Maximum Instantaneous Forward Voltage per Leg	$I_F=10\text{A}$	$T_c=25^\circ\text{C}$	V_F	0.80	V
	$I_F=10\text{A}$	$T_c=125^\circ\text{C}$		0.70	
Maximum Reverse Current per Leg at Working Peak Reverse Voltage		$T_J=25^\circ\text{C}$	I_R	200	μA
		$T_J=100^\circ\text{C}$		15	mA
Thermal Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)					
Symbol	Parameter	Typ.(TO-263)			Unit
$R_{\theta JC}$	Thermal Resistance, Junction to Case per Leg	2.0			°C/W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient per Leg	62.5			°C/W

Note: Pulse test:300us pulse width, duty cycle=2%



STEIF POWER
TECHNOLOGY

MBRB2060CT

Schottky Barrier Rectifier
Reverse Voltage 60 V Forward Current 20 A

Ratings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

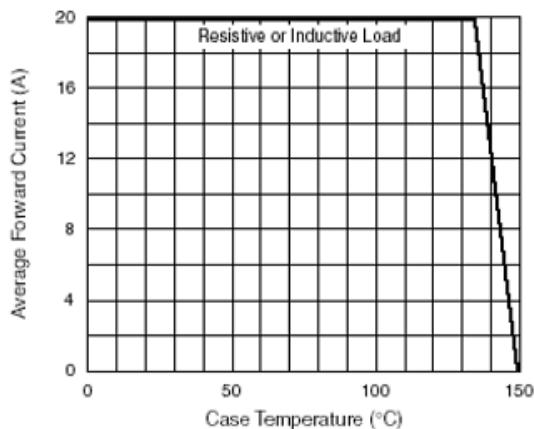


Figure 1. Forward Derating Curve (Total)

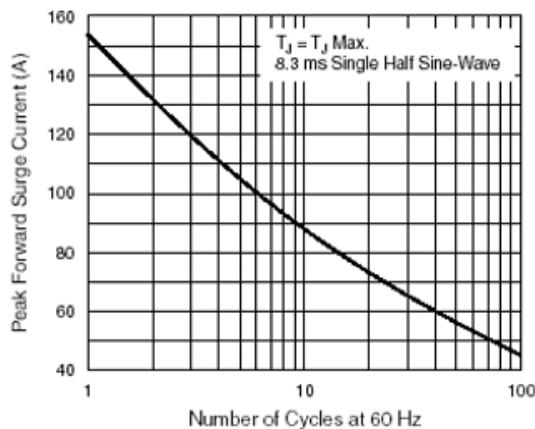


Figure 2. Maximum Non-Repetitive Peak Forward Surge

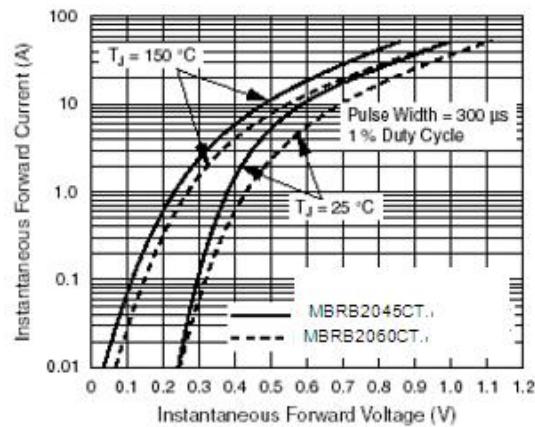


Figure 3. Typical Instantaneous Forward Characteristics Per Diode

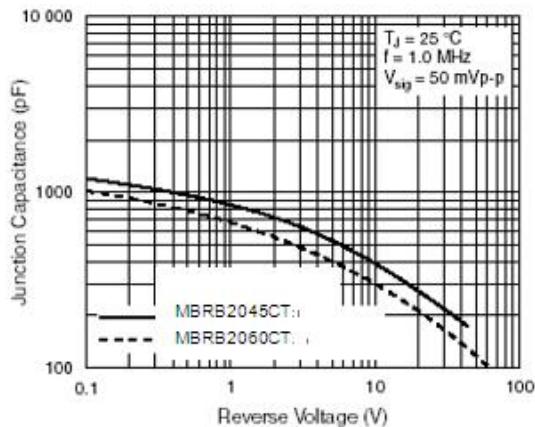


Figure 5. Typical Junction Capacitance Per Diode

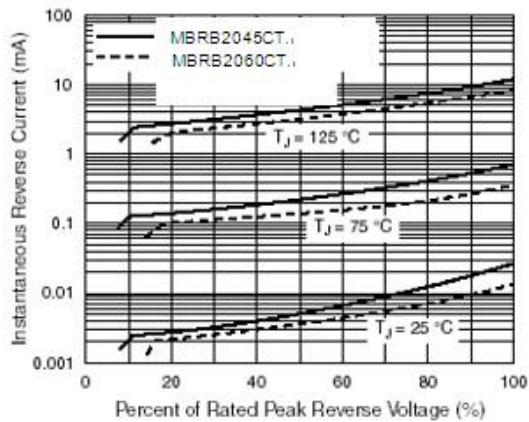


Figure 4. Typical Reverse Characteristics Per Diode

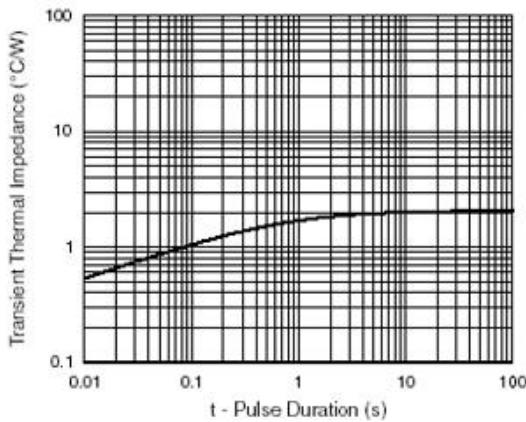
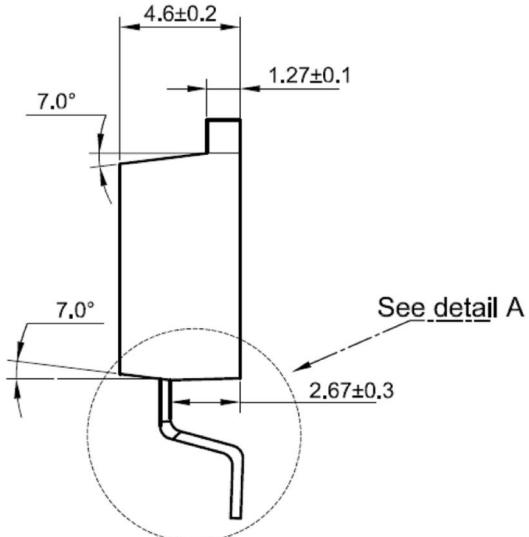
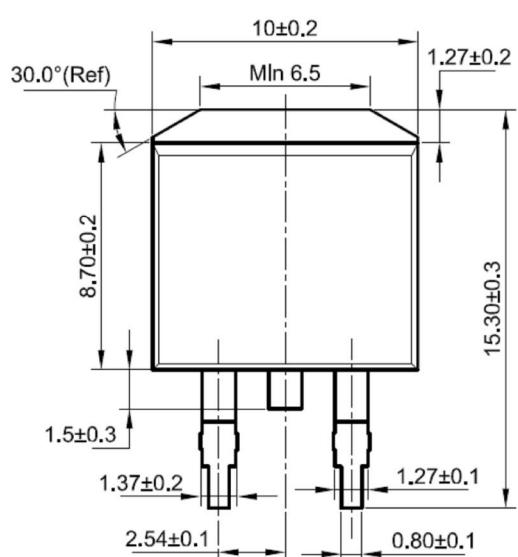


Figure 6. Typical Transient Thermal Impedance Per Diode

Package Outline Dimensions

in millimeters

TO-263



Detail A

