# SEMICONDUCTOR TECHNICAL DATA

#### Dual Schottky Barrier Rectifiers Reverse Voltage 60 Volts Forward Current 30.0 Amperes

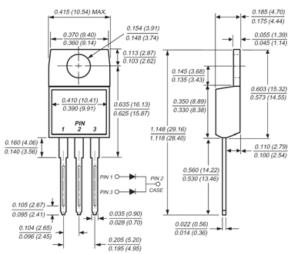
## Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Guardring for overvoltage protection
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
  High temperature soldering guaranteed;
- High temperature soldering guaranteed: 250°C/10 seconds, 0.25" (6.35mm) from case

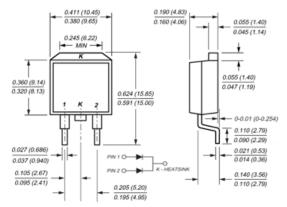
## **Mechanical Data**

- Case: JEDEC TO-220AB, TO-220F, TO-263AB molded plastic body
- Terminals: Plated leads, solderable per MIL-STD-750, Method 2026
- Polarity: As marked
- Mounting Position: Any
- Mounting Torque: 10 in-lbs maximum
- ♦ Weight: 0.08 ounce, 2.24 grams

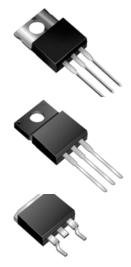
#### TO-220AB



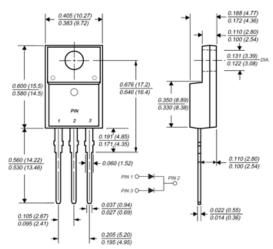
#### TO-263AB(D<sup>2</sup>PAK)



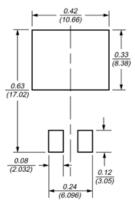
Dimensions in inches and (millimeters)



TO-220F



#### Mounting Pad Layout TO-263AB





## **Maximum Ratings and Electrical Characteristics**

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

PARAMETER	TEST CONDITIONS		SYMBOL	MBRF3060CT	UNIT
Maximum repetitive peak reverse voltage		VRRM 60		60	V
Working peak reverse voltage			VRWM	60	V
Maximum DC blocking voltage			VDC	60	V
Maximum average forward rectified current at Tc=105°C total device per diode			lf(AV)	30 15	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode			IFSM	200	A
Peak repetitive reverse current per leg at tp=2.0us, 1KHz			Irrm	1.0	A
Voltage rate of change (rated VR)			DV/dt	10000	V/us
Operating junction temperature range			TJ		°C
Storage temperature range			TSTG		°C
Isolation voltage (ITO-220 only) from terminal to heatsink t = 1 sec			VAC	1500	V
Maximum instantaneous forward voltage per leg	IF=15A IF=15A	Tc=25°C Tc=125℃	VF	0.85 0.75	V
Maximum reverse current per leg at working peak Reverse voltage		Tc=25°C Tc=100°C	IR	0.5 40	mA

#### Thermal Characteristics Ta=25°C unless otherwise noted

Symbol	Parameter	Max	Unit
Rejc	Thermal Resistance, Junction to Case per Leg	4.0	°C/W
Reja	Thermal Resistance, Junction to Ambient per legs	62.5	°C/W

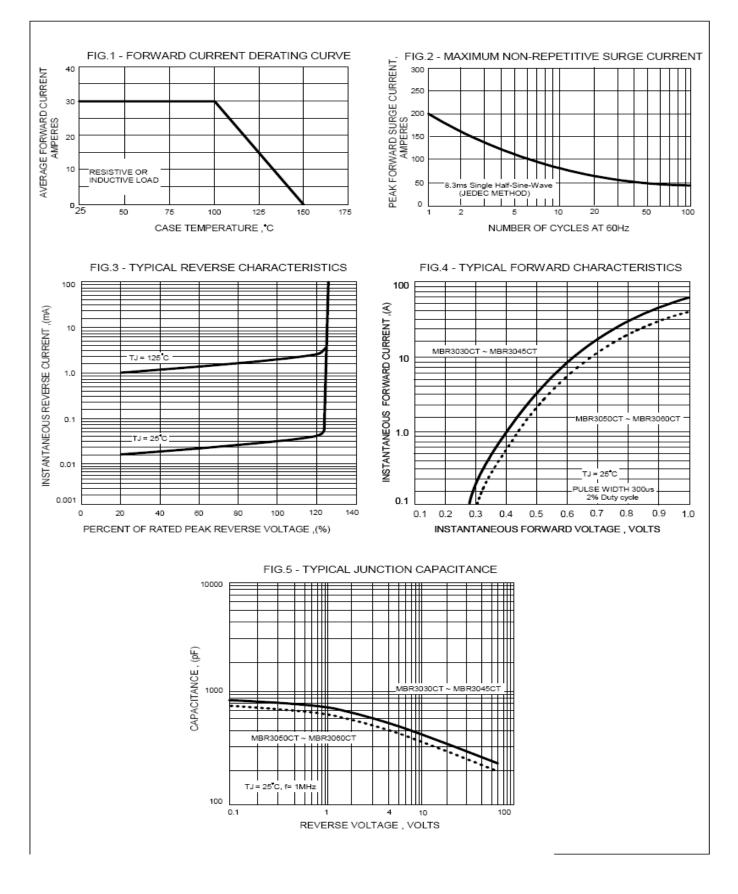
#### Note:

1. Screw mounting with 4-40 screw, where washer diameteris≤4.9mm(0.19 ")

2. Pulse test:300us pulse width,1% duty cycle



## **Rating and Characteristic Curves**



**First Silicon**