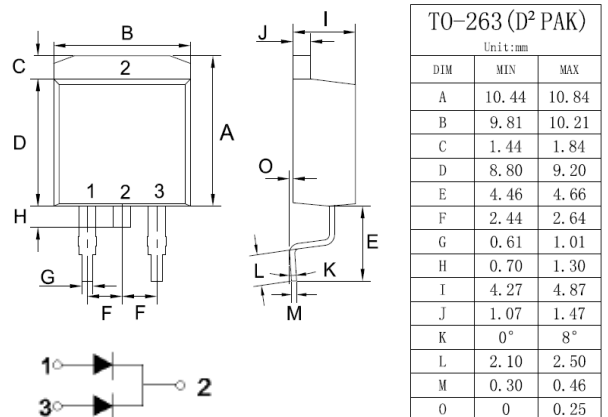


## Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0  
Flame Retardant Epoxy Molding Compound
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Guardring for overvoltage protection
- High surge capability
- For use in low voltage, high frequency inverters  
Free wheeling, and polarity protection applications.
- In compliance with EU RoHS

## TO-263



## Mechanical Data

**Case:** TO-263AB molded plastic

**Terminals:** Plated Leads Solder able per MIL-STD-750, Method 2026

**Polarity:** As marked

**Mounting Position:** Any

## Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MBR 1040CGD	MBR 1050CGD	MBR 1060CGD	MBR 1080CGD	MBR 10100CGD	MBR 10150CGD	MBR 10200CGD	UNITS	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	40	50	60	80	100	150	200	V	
Maximum RMS Voltage	$V_{RMS}$	28	35	42	56	70	105	140	V	
Maximum DC Blocking Voltage	$V_{DC}$	40	50	60	80	100	150	200	V	
Maximum Average Forward (See Figure 1)	$I_{F(AV)}$	10							A	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JED EC method)	$I_{FSM}$	100			110				A	
Maximum Forward Voltage at 5.0A per leg	$V_F$	0.6	0.75		0.85		0.92		V	
Maximum DC Reverse Current at $T_J = 25^\circ\text{C}$ Rated DC Blocking Voltage $T_J = 100^\circ\text{C}$	$I_R$	0.05			0.02				mA	
		20			20					
Typical Thermal Resistance	$R_{QJC}$	3.0							°C/W	
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +155						-55 to +175		°C

RATINGS AND CHARACTERISTIC CURVES

