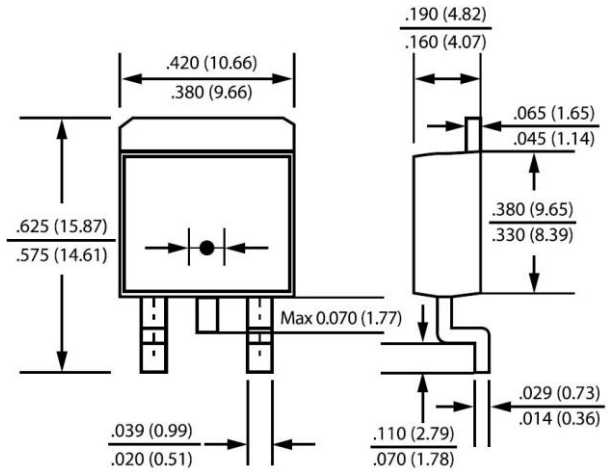
20A Schottky Barrir Rectifiers
Voltage - 40 to 200 Volts Current - 20 Amperes

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.
- High current capability
- For use in low voltage, high frequency inverters free wheeling, and polarlity protection applications.
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA
- Case: TO-263AB molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any



TO-263AB

Dimensions in inches and (millimeters)

Maximum Rating and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified. Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	MBR 2040CD2	MBR 2045CD2	MBR 2050CD2	MBR 2060CD2	MBR 2080CD2	MBR 2090CD2	MBR 20100CD2	MBR 20150CD2	MBR 20200CD2	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage	V_{RMS}	28	31.5	35	42	56	63	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current (See figure 1)	$I_{F(AV)}$	20									A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150									A
Maximum Forward Voltage at 10A, per leg	V_F	0.65		0.8		0.85			0.92		V
Maximum Reverse Current @T_J=25℃ At Rated DC Blocking Voltage @T_J=125℃	I_R	0.05 20									mA
Typical Junction Capacitance (Note 1)	C_J	700		500		400			300	250	pF
Typical Thermal Resistance	$R_{\theta JC}$	9									℃/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							-55 to +175		℃

Note:
1. Measured at 1.0MHz and applied reverse voltage of 4.0Vdc.

DEVICE CHARACTERISTICS

MBR2040CD2 THRU MBR20200CD2

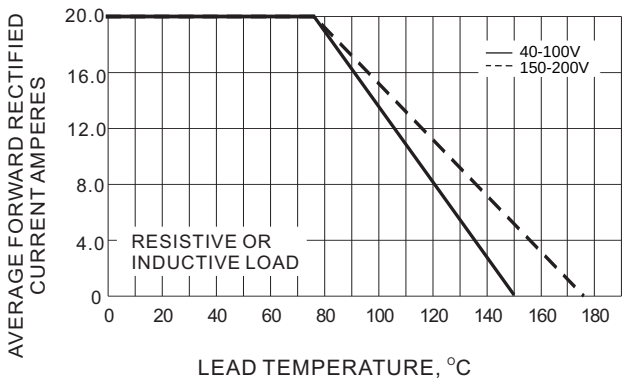


Fig.1- FORWARD CURRENT DERATING CURVE

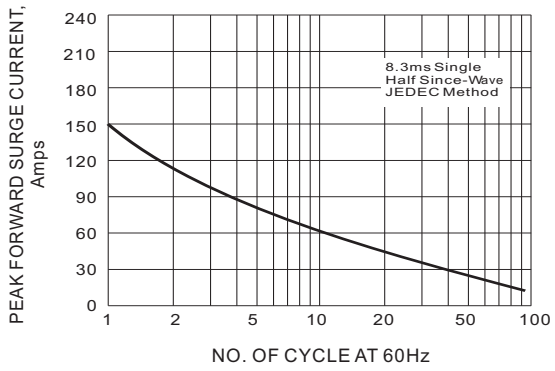


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

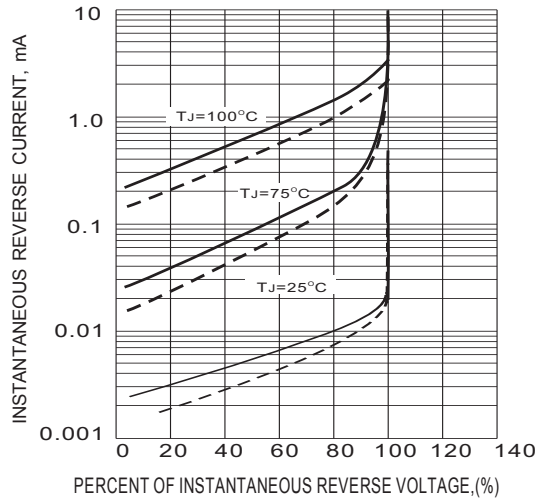


Fig.3- TYPICAL REVERSE CHARACTERISTICS

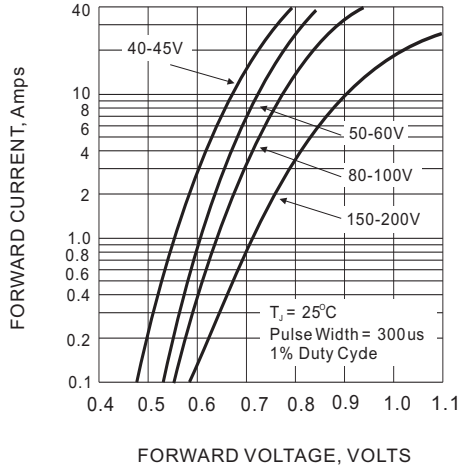


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS