

MS20180 to MS20200

Schottky Barrier Rectifiers

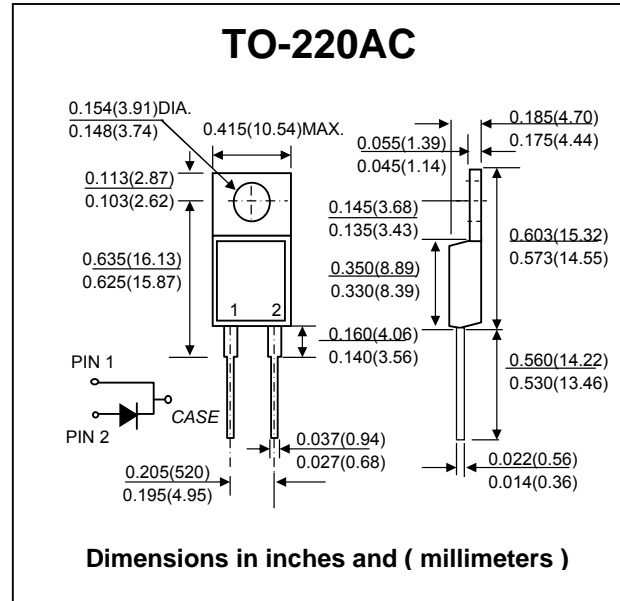
PRV : 180 - 200 Volts
I_o : 20 Ampere

FEATURES :

- * Guard ring for reverse protection
- * Low power loss
- * High efficiency
- * High surge capacity
- * **Pb / RoHS Free**

MECHANICAL DATA :

- * Case : JEDEC TO-220AC molded plastic body
- * Terminals: Plated leads, solderable per MIL-STD-750 Method 2026
- * Polarity: As marked
- * Mounting Position: Any
- * Weight : 2.24 grams (Approximately)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_a = 25°C unless otherwise noted.)

PARAMETER	SYMBOL	MS20180	MS20200	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	180	200	V
Maximum Average Forward Rectified Current at T _C = 141 °C	I _{F(AV)}	20		A
Maximum Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	250		A
Maximum Instantaneous Forward Voltage ⁽¹⁾ at I _F = 20 A, T _J = 25 °C	V _F	0.85		V
I _F = 20 A, T _J = 125 °C		0.67		
Maximum Reverse Current Per Leg at Peak Reverse Voltage ⁽¹⁾ T _J = 25 °C	I _R	100		μA
T _J = 125 °C	I _{R(H)}	250		μA
Typical Junction Capacitance (V _R = 5 V, T _J = 25 °C)	C _J	310		pF
Typical Thermal Resistance, Junction to Case	R _{θJC}	2.1		°C/W
Operating Junction Temperature Range	T _J	- 55 to + 175		°C
Storage Temperature Range	T _{STG}	- 55 to + 175		°C

Note :
 (1) Pulse Test: Pulse Width 300 μs, Duty Cycle 2%.

RATING AND CHARACTERISTIC CURVES (MS20180~ MS20200)

FIG.1 - FORWARD CURRENT DERATING

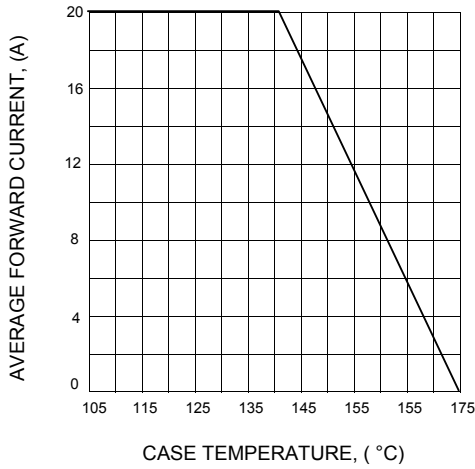


FIG.2 - TYPICAL JUNCTION CAPACITANCE

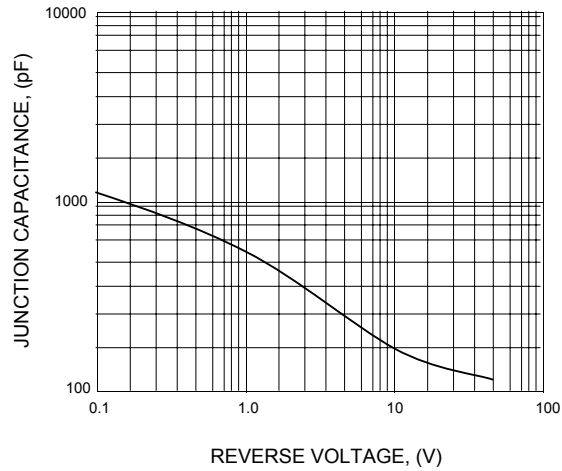


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

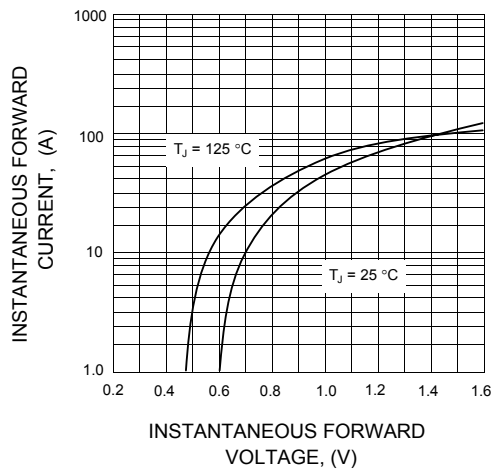


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

