

MS20180 to MS20200

PRV : 180 - 200 Volts
Io : 20 Ampere

FEATURES :

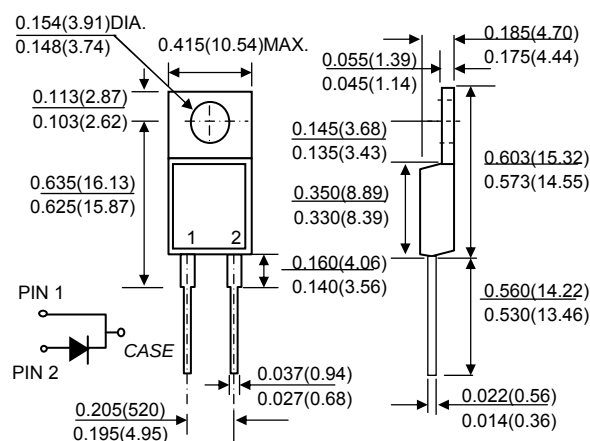
- * Guard ring for reverse protection
- * Low power loss
- * High efficiency
- * High surge capacity
- * Pb / RoHS Free

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)

Schottky Barrier Rectifiers

TO-220AC



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (Ta =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 $T_C = 141^\circ\text{C}$	$I_{F(AV)}$	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 $I_F = 20\text{ A}$, $T_J = 25^\circ\text{C}$ $I_F = 20\text{ A}$, $T_J = 125^\circ\text{C}$	V_F	0.85 0.67		V
Maximum Reverse Current Per Leg $T_J = 25^\circ\text{C}$	I_R	100		μA
at Peak Reverse Voltage ⁽¹⁾ $T_J = 125^\circ\text{C}$	$I_{R(H)}$	250		μA
Typical Junction Capacitance ($V_R = 5\text{ V}$, $T_J = 25^\circ\text{C}$)	C_J	310		pF
Typical Thermal Resistance, Junction to Case	$R_{\theta JC}$	2.1		$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	- 55 to + 175		$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 55 to + 175		$^\circ\text{C}$

Note :

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

RATING AND CHARACTERISTIC CURVES (MS20180~ MS20200)

FIG.1 - FORWARD CURRENT DERATING

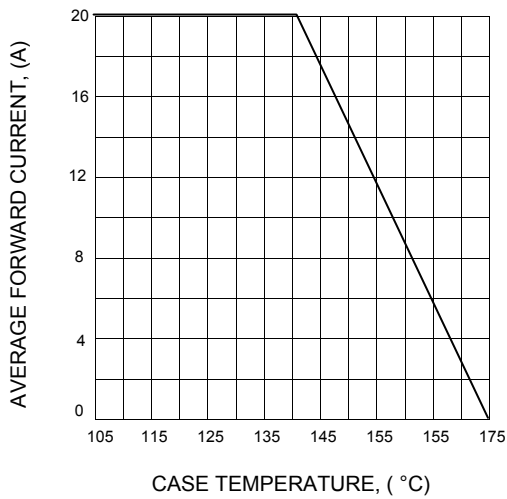


FIG.2 - TYPICAL JUNCTION CAPACITANCE

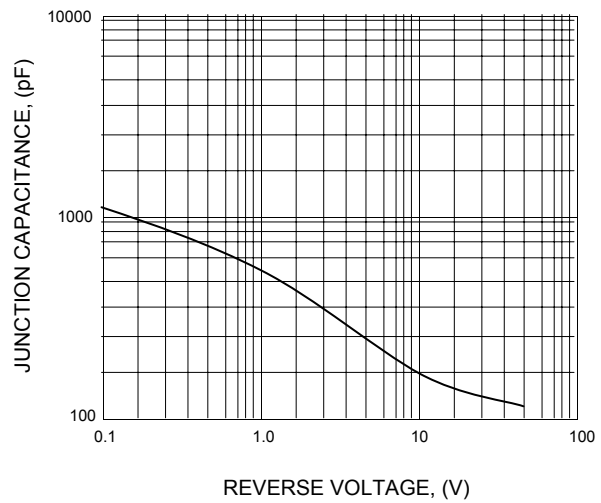


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

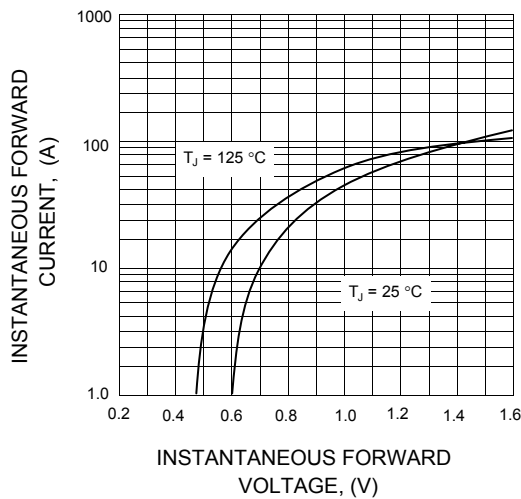


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

