

# MS16180 to MS16200

**PRV : 180 - 200 Volts**  
**I<sub>o</sub> : 16 Ampere**

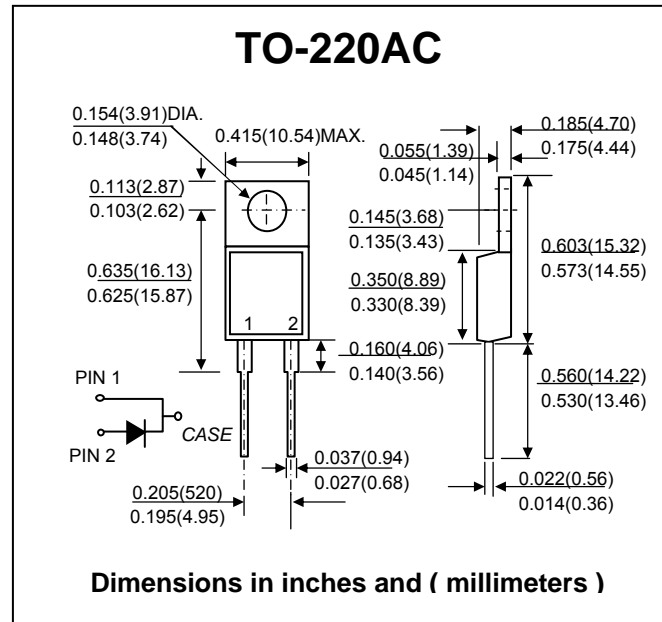
## FEATURES :

- \* 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



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T<sub>a</sub> = 25°C unless otherwise noted.)

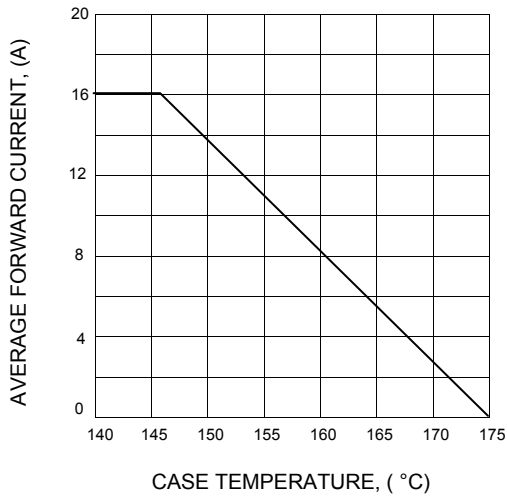
PARAMETER	SYMBOL	MS16180	MS16200	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	180	200	V
Maximum Average Forward Rectified Current at T <sub>C</sub> = 146 °C	I <sub>F(AV)</sub>	16		A
Maximum Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	250		A
Maximum Instantaneous Forward Voltage <sup>(1)</sup>	V <sub>F</sub>	0.88		V
at I <sub>F</sub> = 16 A, T <sub>J</sub> = 25 °C I <sub>F</sub> = 16 A, T <sub>J</sub> = 125 °C		0.74		
Maximum Reverse Current Per Leg at Peak Reverse Voltage <sup>(1)</sup>	I <sub>R</sub>	100		μA
T <sub>J</sub> = 25 °C T <sub>J</sub> = 125 °C	I <sub>R(H)</sub>	400		
Typical Junction Capacitance ( V <sub>R</sub> = 5 V, T <sub>J</sub> = 25 °C)	C <sub>J</sub>	250		pF
Typical Thermal Resistance, Junction to Case	R <sub>θJC</sub>	2.0		°C/W
Operating Junction Temperature Range	T <sub>J</sub>	- 55 to + 175		°C
Storage Temperature Range	T <sub>STG</sub>	- 55 to + 175		°C

### Note :

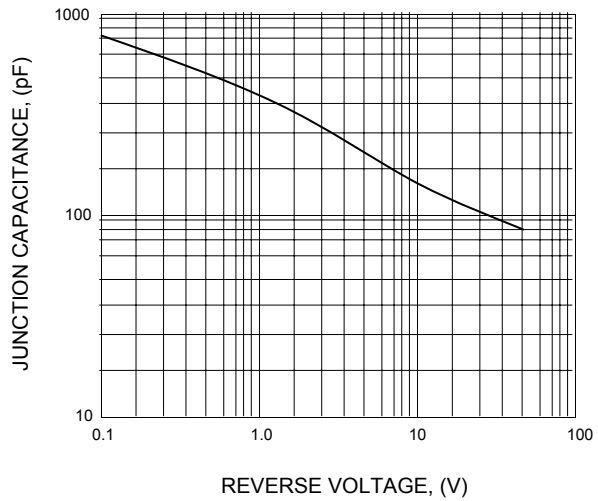
(1) Pulse Test: Pulse Width 300 μs, Duty Cycle 2%.

**RATING AND CHARACTERISTIC CURVES ( MS16180~ MS16200 )**

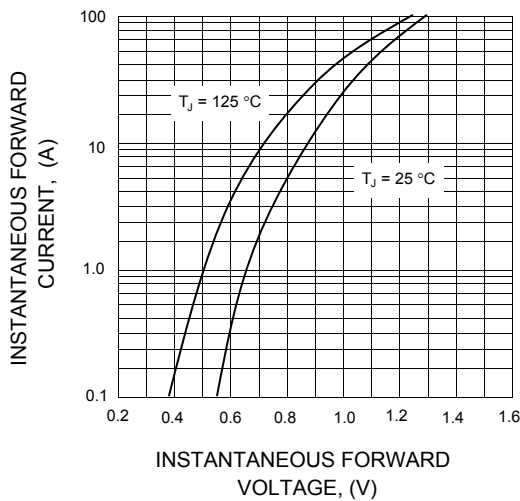
**FIG.1 - FORWARD CURRENT DERATING**



**FIG.2 - TYPICAL JUNCTION CAPACITANCE**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**

