

# FST20180 to FST20200 Dual Schottky Barrier Rectifiers

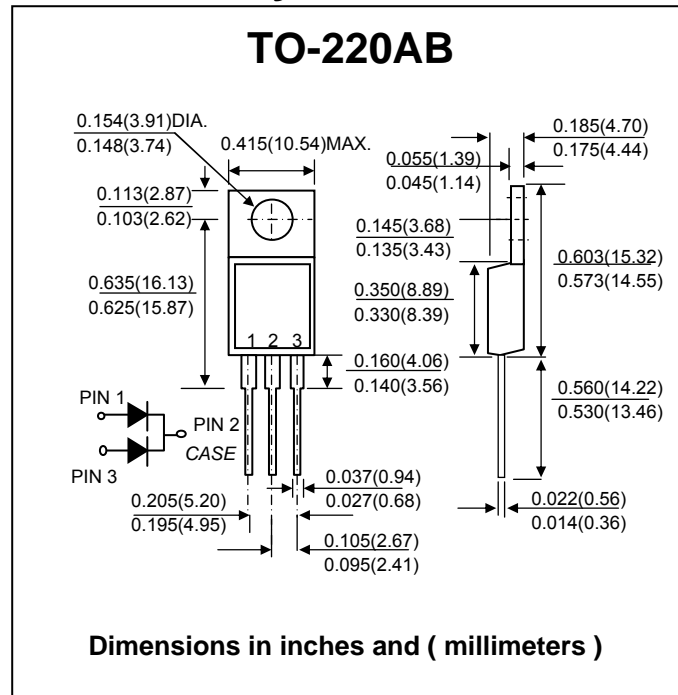
**PRV : 180 - 200 Volts**  
**I<sub>o</sub> : 20 Ampere**

## FEATURES :

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

## MECHANICAL DATA :

- \* Case : JEDEC TO-220AB 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<sub>a</sub> = 25°C unless otherwise noted.)

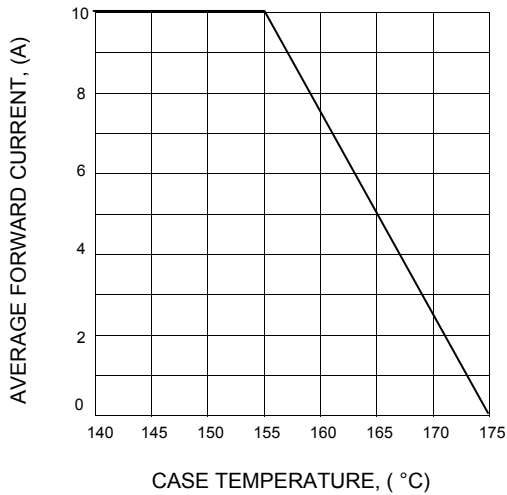
PARAMETER	SYMBOL	FST20180	FST20200	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	180	200	V
Maximum Average Forward Rectified Current at T <sub>C</sub> = 155 °C	I <sub>F(AV)</sub>	20		A
Total device		10		
Per Leg				
Maximum Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load Per Leg	I <sub>FSM</sub>	225		A
Maximum Instantaneous Forward Voltage Per Leg <sup>(1)</sup>	V <sub>F</sub>	0.88		V
at I <sub>F</sub> = 10 A, T <sub>J</sub> = 25 °C		0.73		
at I <sub>F</sub> = 10 A, T <sub>J</sub> = 175 °C				
Maximum Reverse Current Per Leg at Working 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>	200		μA
Typical Junction Capacitance ( V <sub>R</sub> = 5 V, T <sub>J</sub> = 25 °C )	C <sub>J</sub>	190		pF
Typical Thermal Resistance, Junction to Case, Per Leg	R <sub>θJC</sub>	2.4		°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 :

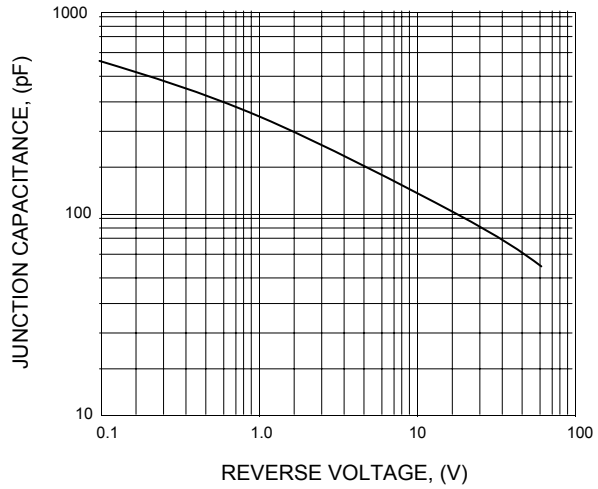
(1) Pulse Test: Pulse Width 300 μs, Duty Cycle 2%.

**RATING AND CHARACTERISTIC CURVES ( FST20180~ FST20200 )**

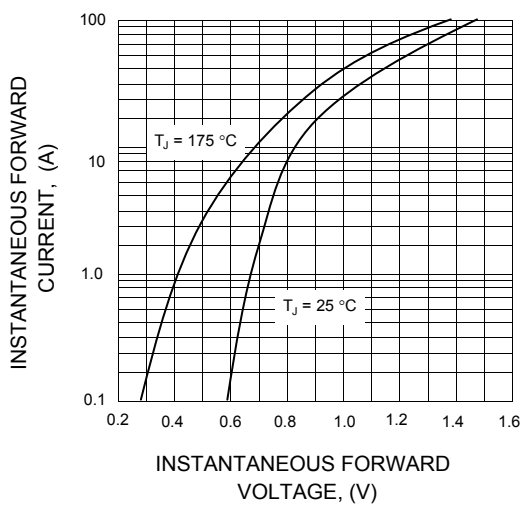
**FIG.1 - FORWARD CURRENT DERATING PER LEG**



**FIG.2 - TYPICAL JUNCTION CAPACITANCE PER LEG**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS PER LEG**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS PER LEG**

