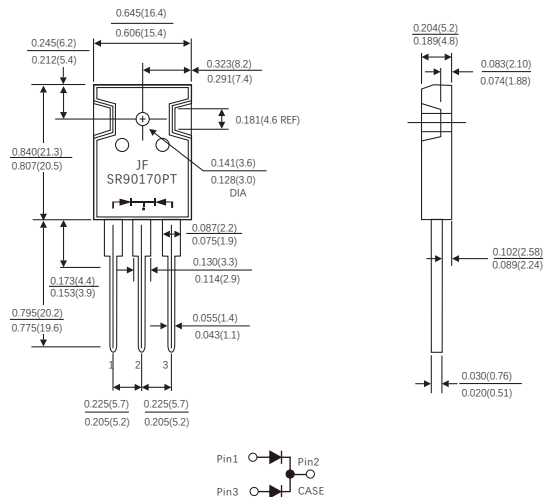


### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,Low forward voltage drop
- High surge capability
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- Dual rectifier construction
- High temperature soldering guaranteed :260 °C /10 seconds, 0.25"(6.35mm)from case
- Component in accordance to 2015/863/EU

### TO-247AB



Dimensions in inches and (millimeters)

### MECHANICAL DATA

- Case: TO-247AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked.
- Mounting Position: Any

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified )

Parameters	Symbols	Value				Units	
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	170				V	
Maximum RMS voltage	V <sub>RMS</sub>	120				V	
Maximum DC blocking voltage	V <sub>DC</sub>	170				V	
Maximum average forward rectified current(see Fig.1)	Per leg	45.0				A	
	Total device	90.0					
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	460				A	
Forward voltage at 45A per leg (Note 1)	V <sub>F</sub>	TYP.	0.85	MAX.	0.90	V	
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	I <sub>R</sub>	T <sub>J</sub> =25°C	TYP.	-	MAX.	20	uA
		T <sub>J</sub> =125°C	TYP.	-	MAX.	20	mA
Typical thermal resistance (Note 2)	R <sub>θJC</sub>	0.23				°C/W	
Operating junction temperature range	T <sub>J</sub>	-55 to+150				°C	
Storage temperature range	T <sub>STG</sub>	-55 to+150				°C	

Notes: 1.Pulse test: 300 us pulse width,1% duty cycle  
2.Thermal resistance from junction to case

FIG.1-FORWARD CURRENT DERATING CURVE

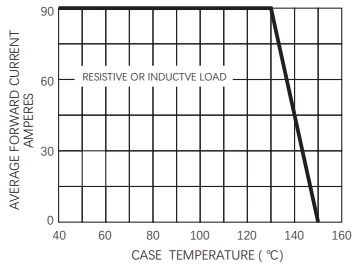


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

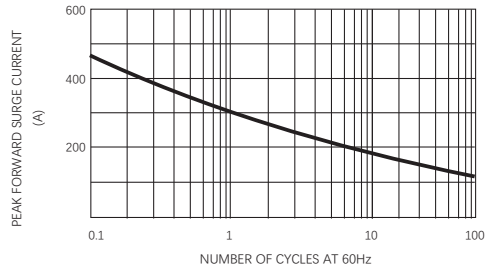


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

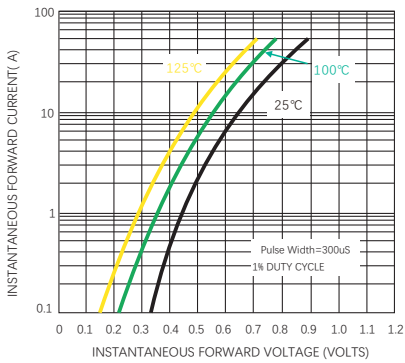
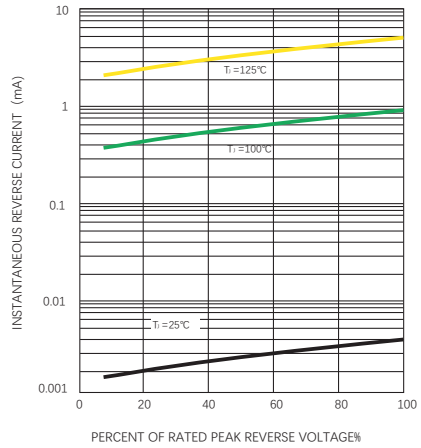


FIG.4-TYPICAL REVERSE CHARACTERISTICS



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