



**DESCRIPTION**

The FR3060 is available in TO-247S-2 package.

**MECHANICAL DATA**

- Case: Molded Plastic Body
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Polarity Symbol Marking on Body
- Mounting Position: Any

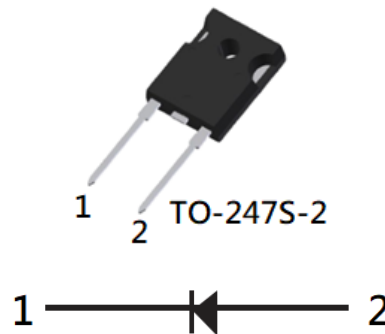
**FEATURE**

- The Plastic Package Carries Underwriters Laboratory Flammability Classification 94V-0
- Construction Utilizes Void-Free Molded Plastic Technique
- Low Reverse Leakage
- High Forward Surge Current Capability
- High Temperature Soldering Guaranteed 260°C/10 Seconds at Terminals

**ORDERING INFORMATION**

Package Type	Part Number
TO-247S-2	FR3060
Note	SPQ: 30pcs/Tube
AiT provides all RoHS Compliant Products	

**PIN DESCRIPTION**



**ABSOLUTE MAXIMUM RATINGS**

T<sub>A</sub> = 25°C, unless otherwise specified

V <sub>RRM</sub> , Maximum Repetitive Peak Reverse Voltage	600V
V <sub>RMS</sub> , Maximum RMS Voltage	420V
V <sub>DC</sub> , Maximum DC Blocking Voltage	600V
I <sub>(AV)</sub> , Maximum Average Forward Rectified Current at T <sub>C</sub> =120°C	30A
I <sub>FSM</sub> , Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load	300mA
R <sub>qJC</sub> , Typical Thermal Resistance	1.50W/°C
T <sub>j</sub> , Operating Junction Temperature Range	-55°C ~ + 175°C
T <sub>stg</sub> , Storage Temperature Range	-55°C ~ + 150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.



## ELECTRICAL CHARACTERISTICS

T<sub>a</sub> = 25°C, unless otherwise specified

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Maximum Instantaneous Forward Voltage Per Diode at 30A	V <sub>F</sub>	-	-	1.80	2.50	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	T <sub>A</sub> =25°C	-	0.50	5	uA
		T <sub>A</sub> =125°C	-	50	200	
Maximum Reverse Recovery Time	T <sub>rr</sub>	-	-	26	35	nS

## TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Derating Curve Output Rectified Current

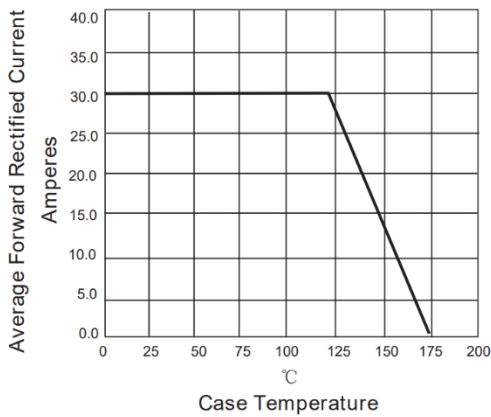


Fig 2. Maximum Non-Repetitive Peak Forward Surge Current Per leg

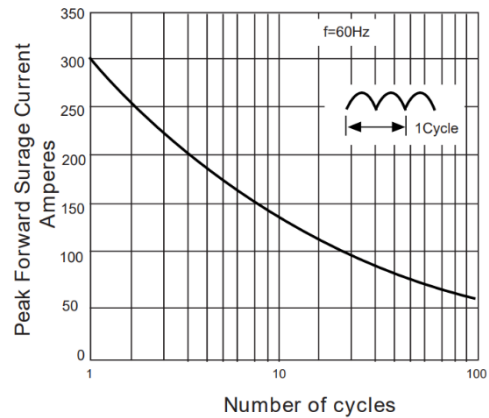


Fig 3. Typical Forward Voltage Characteristics

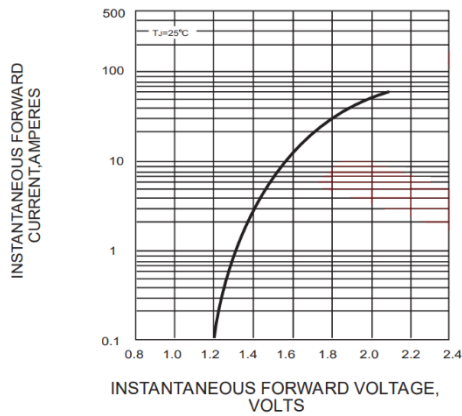
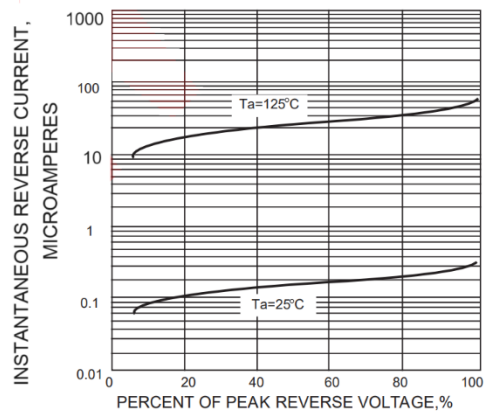


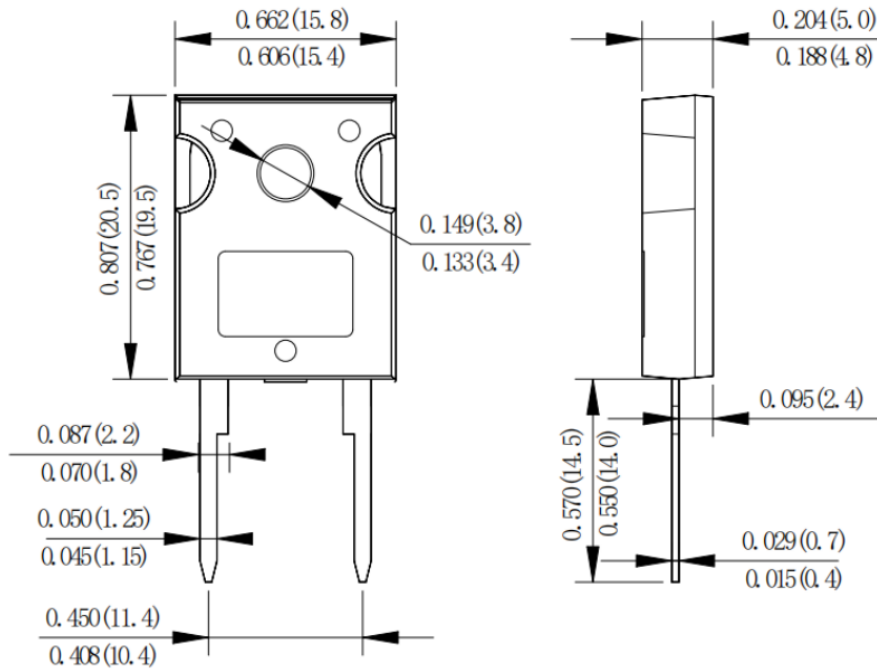
Fig 4. Typical Reverse Leakage Characteristics





**PACKAGE INFORMATION**

Dimension in TO-247S-2 Package





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