

**High Efficiency Rectifiers**

**Reverse Voltage - 800V**

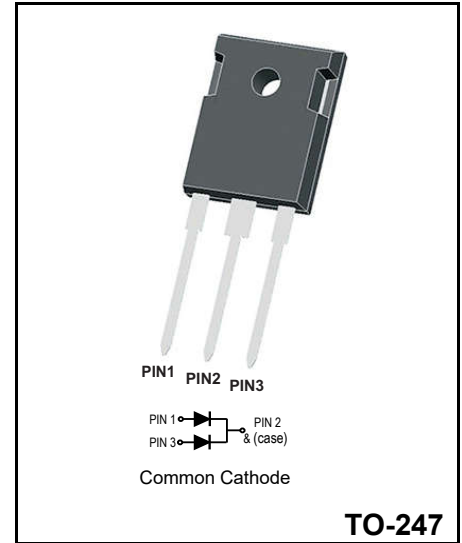
**Forward Current - 40A**

**Features**

- ◆ Glass passivated chip junctions
- ◆ High Speed recovery time for switching mode application
- ◆ High Forward Surge Capability
- ◆ Low Reverse Current
- ◆ Lead free in compliance with EU RoHS 2011/65/EU directive

**Mechanical Data**

- ◆ Leads: Solderable per mil-std-202, Method 208
- ◆ Polarity: as marked
- ◆ Mounting torque: 5 in-lbs maximum
- ◆ Terminals: Puretin plated
- ◆ Weight: 5.85 grams



**Maximum Ratings & Electrical Characteristics**

Rating	Symbol	Value	Unit
Maximum Repetitive Reverse Voltage	<b>V<sub>RRM</sub></b>	800	<b>V</b>
Maximum RMS voltage	<b>V<sub>RMS</sub></b>	560	<b>V</b>
DC Blocking Voltage	<b>V<sub>DC</sub></b>	800	<b>V</b>
Average Forward Current per device per diode	<b>I<sub>F</sub></b>	40 20	<b>A</b>
Max.Forward Surge Current ,8.3ms single half sine-wave superimposed on rated load	<b>I<sub>FSM</sub></b>	500	<b>A</b>
Typical Forward Voltage at I <sub>F</sub> =20A	<b>V<sub>F</sub></b>	1.7	<b>V</b>
Max. DC Reverse Current at Rated DC Blocking Voltage	<b>I<sub>R</sub></b>	5 250	<b>μA</b>
Typical Reverse Recovery Time (Note 1)	<b>T<sub>RR</sub></b>	100	<b>nS</b>
Typical Thermal Resistance(Note 2)	<b>R<sub>θ-JC</sub></b>	1.5	<b>°C/W</b>
Operating Junction Temperature Range	<b>T<sub>J</sub></b>	-55 to +150	<b>°C</b>
Storage Temperature Range	<b>T<sub>STG</sub></b>	-55 to +150	<b>°C</b>

NOTES:

1. Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, I<sub>rr</sub>=0.25A.
2. Thermal resistance from junction to case.

**Ratings and Characteristic Curves**

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

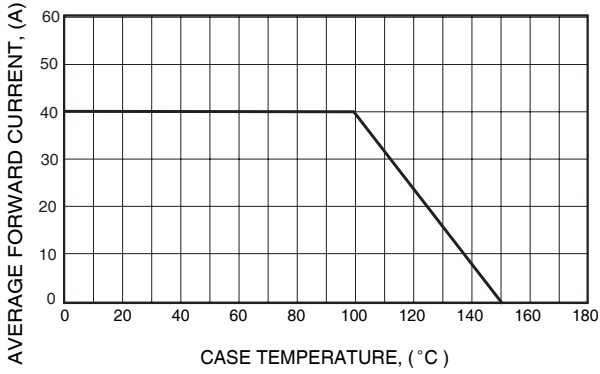


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

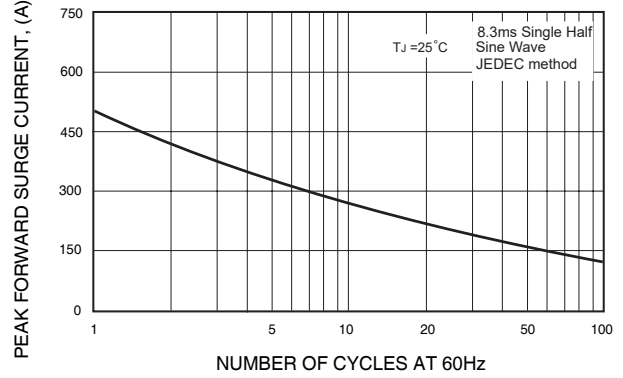


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

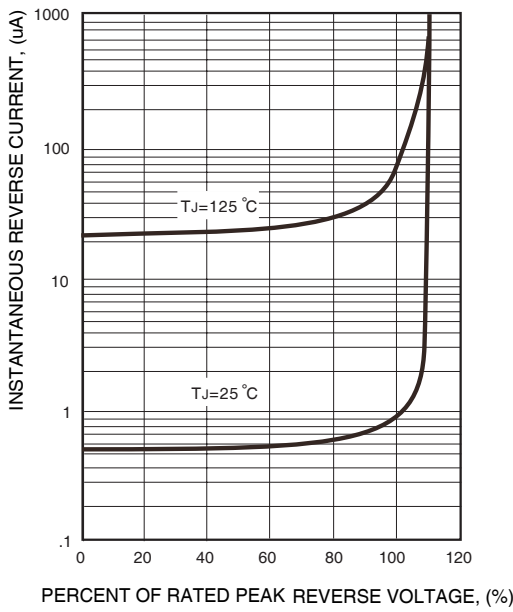
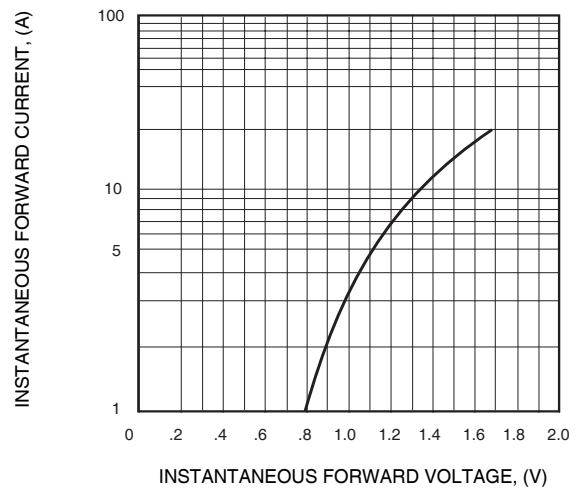
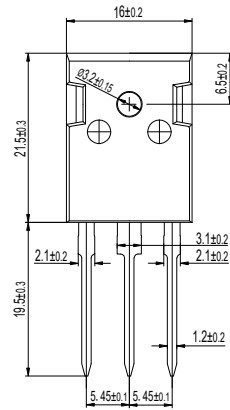


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



Package Outline Dimensions Millimeters

TO-247



Dimensions in millimeters

