

**High Efficiency Rectifiers**

**Reverse Voltage - 400V**

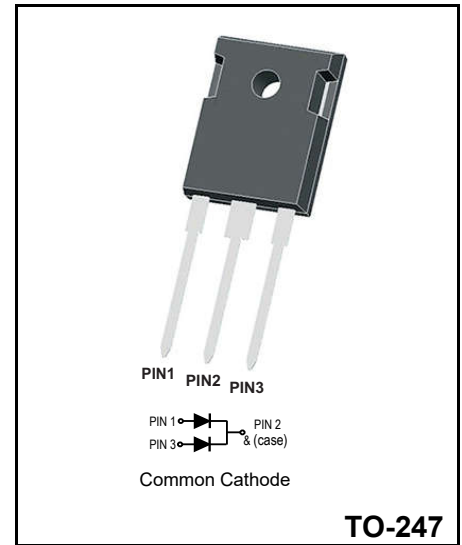
**Forward Current - 40A**

**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	$V_{RRM}$	400	V
Maximum RMS voltage	$V_{RMS}$	280	V
DC Blocking Voltage	$V_{DC}$	400	V
Average Forward Current per device per diode	$I_F$	40 20	A
Max.Forward Surge Current ,8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	500	A
Typical Forward Voltage at $I_F=20A$	$V_F$	1.30	V
Max. DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5 250	$\mu A$
			$T_A = 25^{\circ}C$ $T_A = 125^{\circ}C$
Typical Reverse Recovery Time (Note 1)	$T_{RR}$	50	nS
Typical Thermal Resistance(Note 2)	$R_{\theta-JC}$	1.5	$^{\circ}C/W$
Operating Junction Temperature Range	$T_J$	-55 to +150	$^{\circ}C$
Storage Temperature Range	$T_{STG}$	-55 to +150	$^{\circ}C$

NOTES:

1. Reverse Recovery Test Conditions:  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{rr}=0.25A$ .
2. Thermal resistance from junction to case.

**Ratings and Characteristic Curves**

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

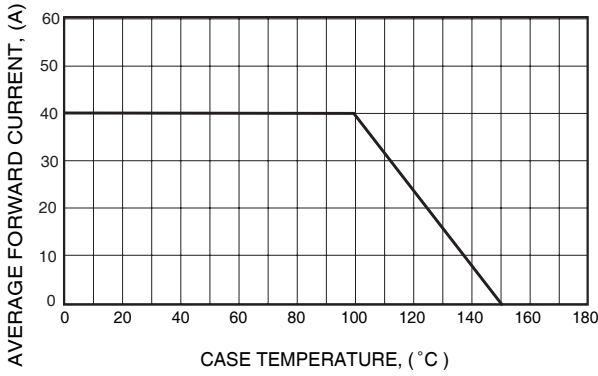


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

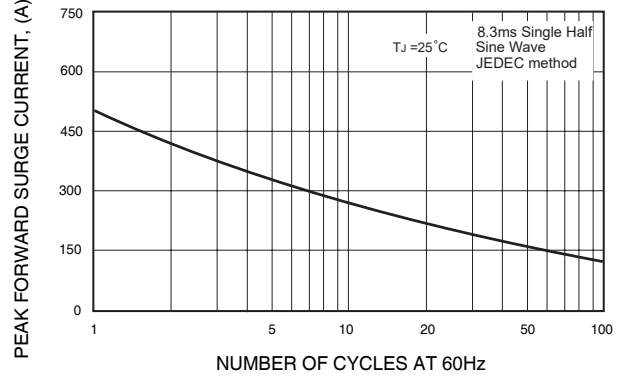


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

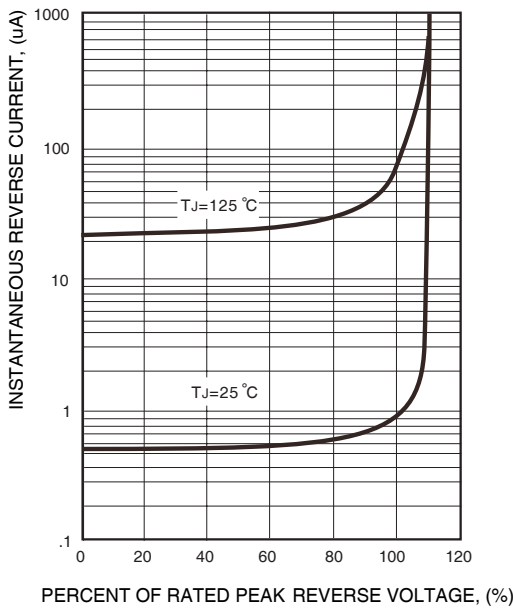
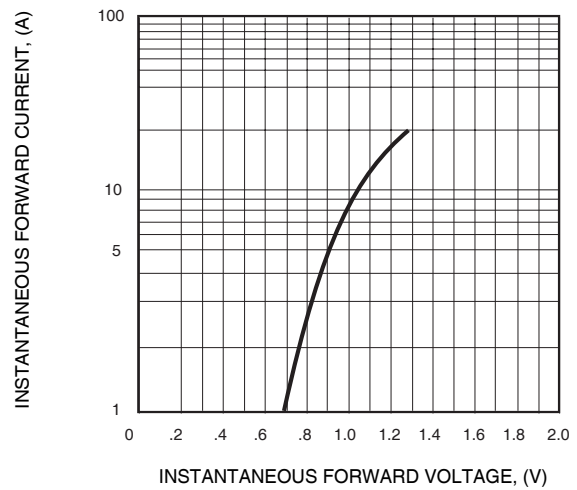


FIG. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



Package Outline Dimensions Millimeters

TO-247

Dimensions in millimeters

