

**Voltage Range 20 to 100 V**  
**Current 40.0 Ampere**

**Features**

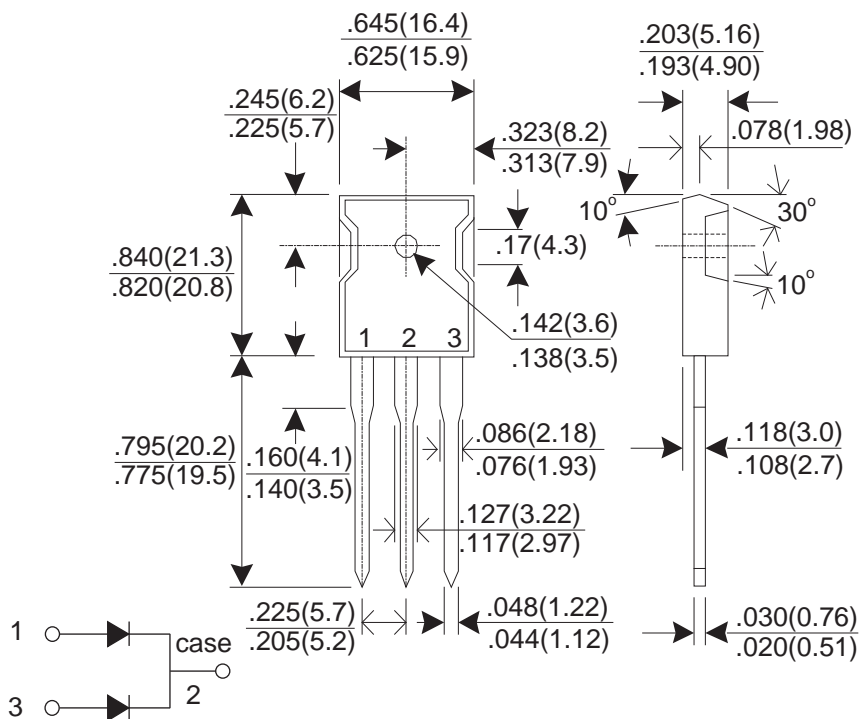
- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability

**Mechanical Data**

- \* Case: Molded plastic TO-247-3L
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Terminals: Solderable per MIL-STD-202 method 208
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 6.2 grams

**Dimensions in inches and (millimeters)**

**TO-247-3L**



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.  
 Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

PARAMTER	SYBMOL	TSR 40P20C	TSR 40P40C	TSR 40P60C	TSR 40P80C	TSR 40P100C	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	20	40	60	80	100	V
Maximum RMS Voltage	VRMS	14	28	42	56	70	V
Maximum DC Blocking Voltage	VDC	20	40	60	80	100	V
Maximum Average Forward Rectified Current TL=100°C	IF(AV)	40.0					A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC Method)	IFSM	350					A
Maximum Instantaneous Forward Voltage @ 20.0 A	VF	0.55	0.65	0.75	0.85	V	
Maximum DC Reverse Current @TJ=25°C At Rated DC Blocking Voltage @TJ=100°C	IR	5.0 200					mA
Typical junction Capacitance (Note 1)	CJ	800					pF
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to +125 / -55 to +150					°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

RATING AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

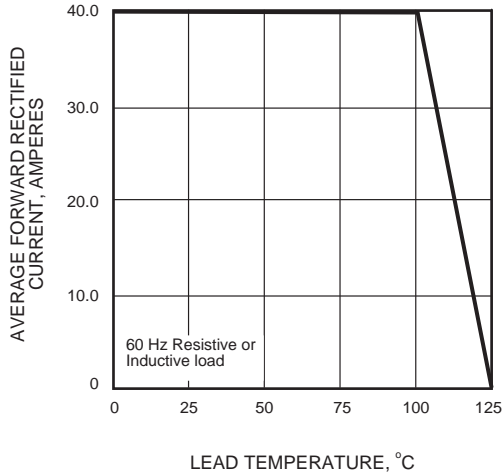


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

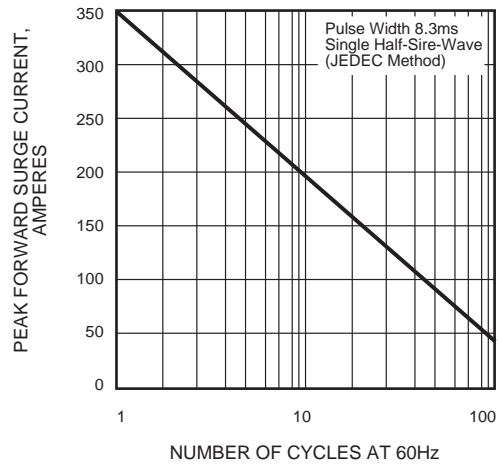


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

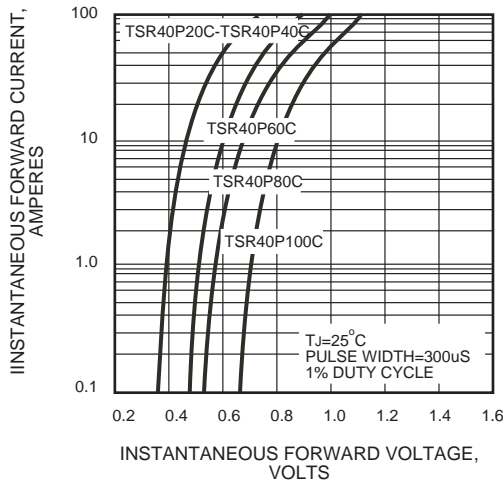


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

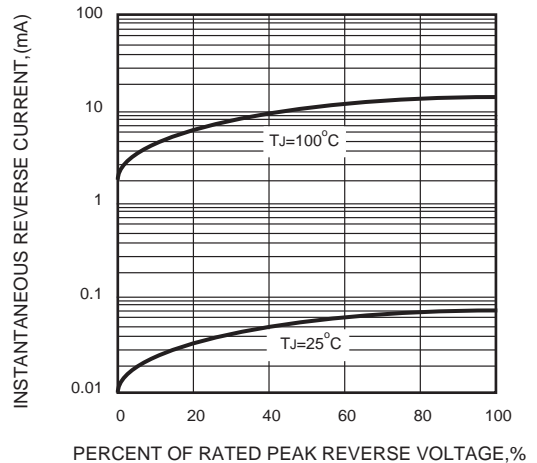


FIG.5 - TYPICAL JUNCTION CAPACITANCE

