

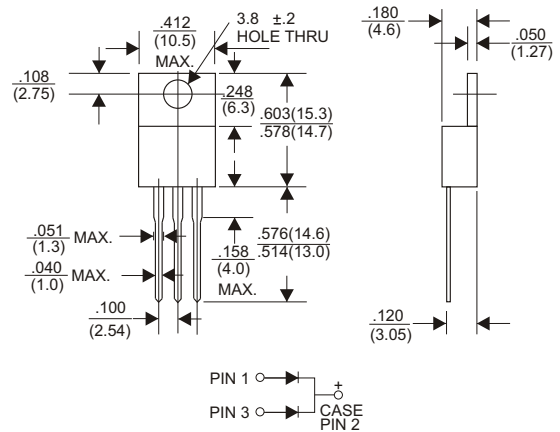
## 30.0 AMP SCHOTTKY BARRIER RECTIFIERS

### Features:

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

### Mechanical Data:

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Lead solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: As Marked
- \* Mounting position: Any



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	KSR30150CT	KSR30200CT	UNITS
Maximum Recurrent Peak Reverse Voltage	150	200	V
Maximum RMS Voltage	105	140	V
Maximum DC Blocking Voltage	150	200	V
Maximum Average Forward Rectified Current at T <sub>c</sub> =95°C	30.0		A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	300		A
Maximum Instantaneous Forward Voltage per Leg at 15A	0.95		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	0.2		mA
Typical Junction Capacitance (Note1)	20		mA
Typical Thermal Resistance R <sub>θJC</sub> (Note 2)	450		pF
Operating Temperature Range T <sub>J</sub>	2.5		°C/W
Storage Temperature Range T <sub>STG</sub>	-65 — +150		°C
	-65 — +150		°C

#### NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case.

**RATING AND CHARACTERISTIC CURVES (KSR3020CT THRU KSR30100CT)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

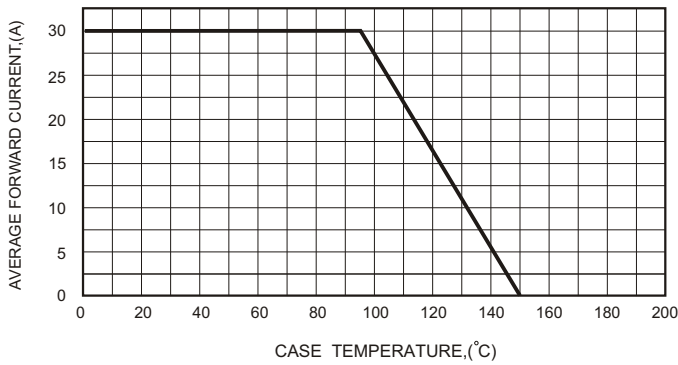


FIG.2-TYPICAL FORWARD CHARACTERISTICS

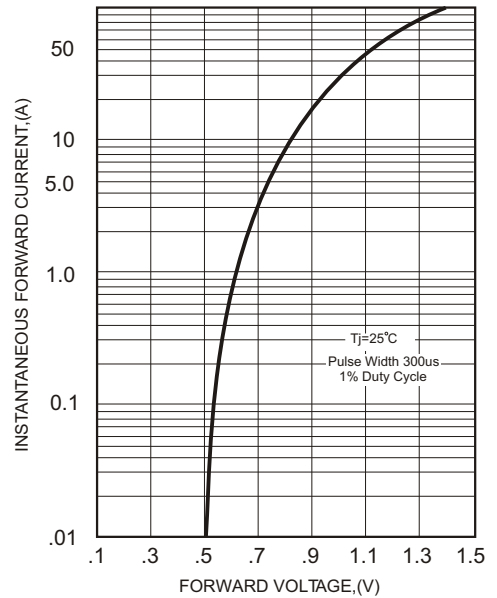


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

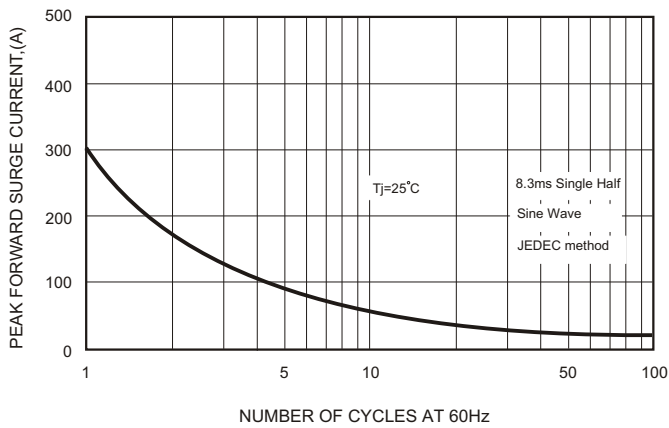


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

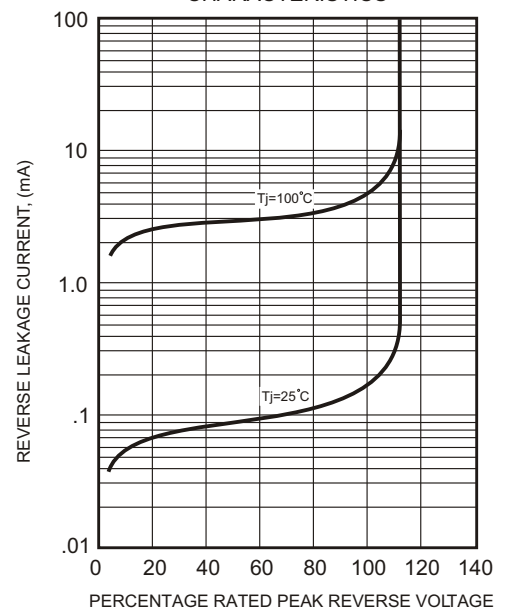


FIG.4-TYPICAL JUNCTION CAPACITANCE

