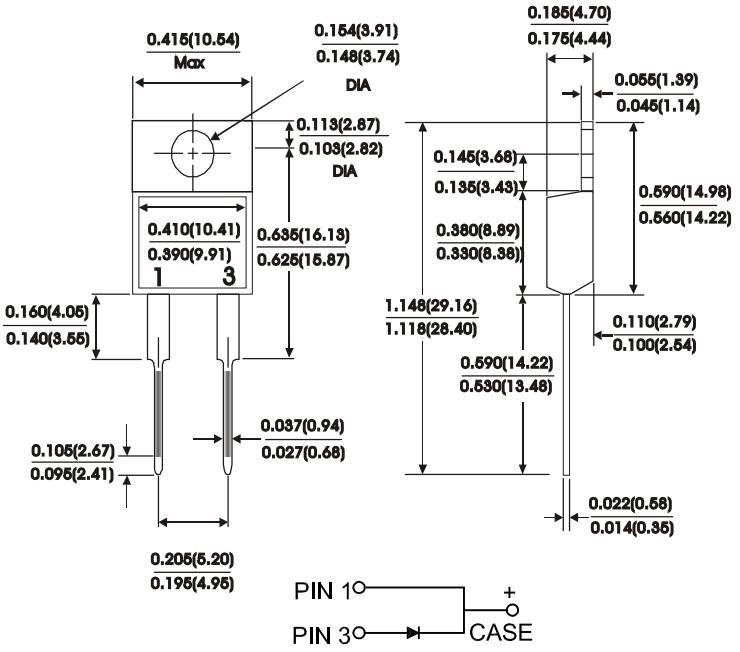
SR2090 THUR SR20100

SCHOTTKY BARRIER RECTIFIERS

FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction Majority carrier conduction
- Low power loss, high efficiency
- High current capability, low forward voltage drop
- High temperature soldering guaranteed: 250℃/10 seconds, 0.25"(6.35mm) from case

TO-220 AC



MECHANICAL DATA

Case : JEDEC TO-220AC molded plastic
Teminals : Leads solderable per MIL-STD-750 Method 2026
Polarity : As marked
Mounting Postition : Any
Mounting Torque 5 in - lbs.max
Weight : 0.08 ounce, 2.24 grams

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Characteristic	Symbol	SR2090	SR20100	Units
Maximum recurrent peak reverse voltage	V_{RRM}	90	100	Volts
Maximum RMS voltage	V_{RMS}	63	70	Volts
Maximum DC blocking voltage	V_{DC}	90	100	Volts
Maximum average forward rectified current at TC=125℃	I_O	20		Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300		Amps
Maximum instantaneous forward voltage (NOTE 2) IF=20A	V_F	0.95		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (NOTE 2) TC=25℃ / TC=100℃	I_R	0.1 6.0		mA
Typical thermal resistance (NOTE 1)	R_{th}-JC	3.5		℃/W
Operating temperature range	T_J	-65to+150		℃
Storage temperature range	T_{Stg}	-65to+175		℃

NOTES:
(1)Thermal resistance from junction to case
(2)Pulse test : 300 us pulse width, 1% duty cycle

FIG.1 - TYPICAL FORWARD CORRENT DERATING CURVE

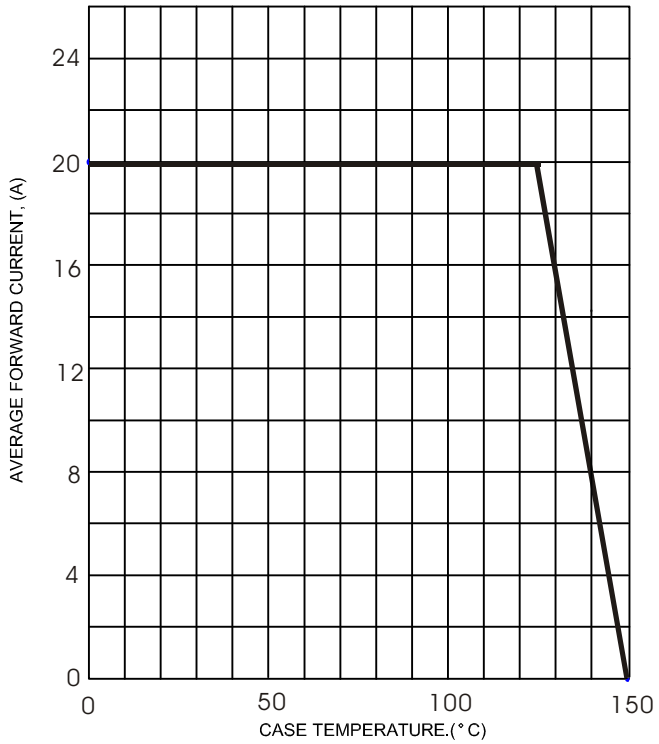


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

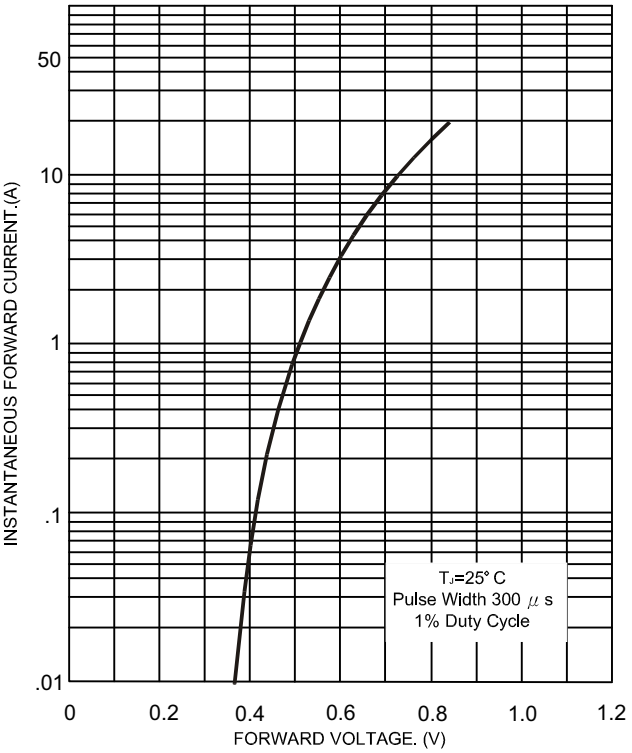


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

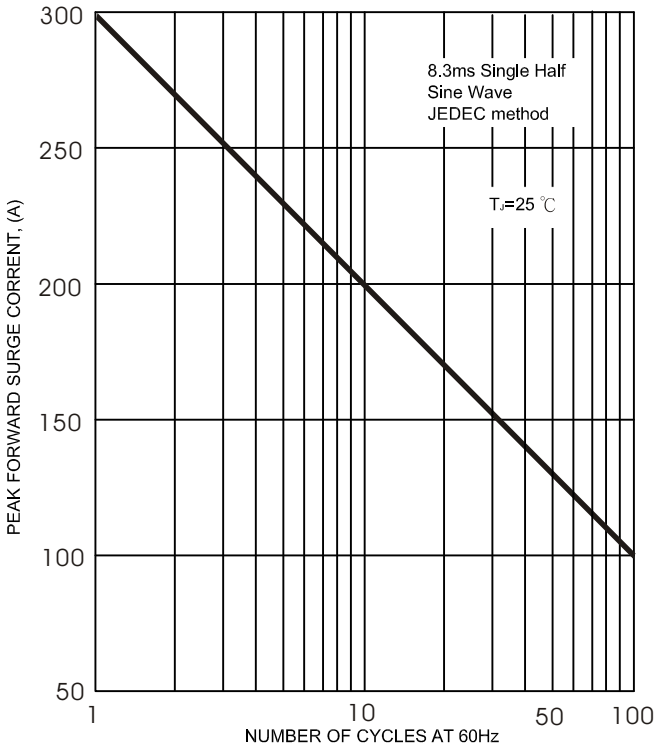
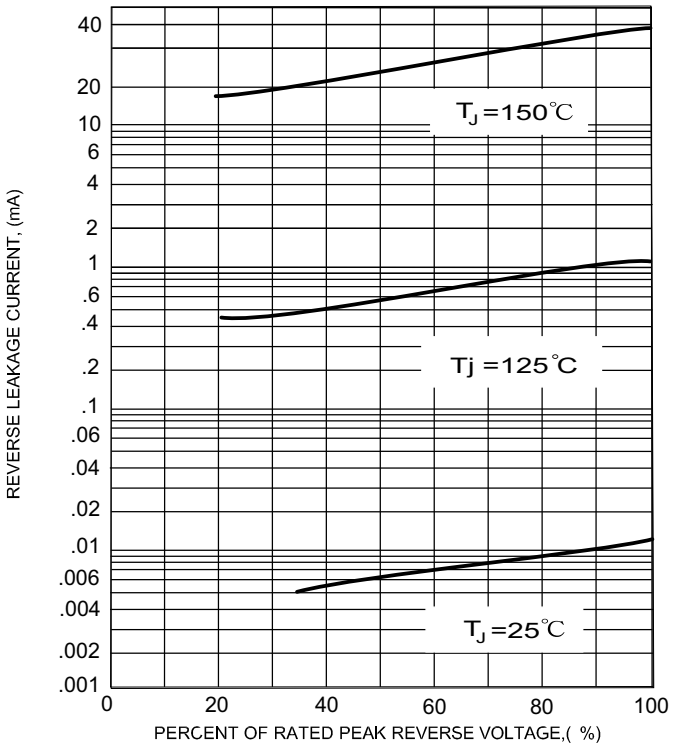



FIG.4- TYPICAL REVERSE CHARACTERISTICS