



SCHOTTKY BARRIER RECTIFIERS

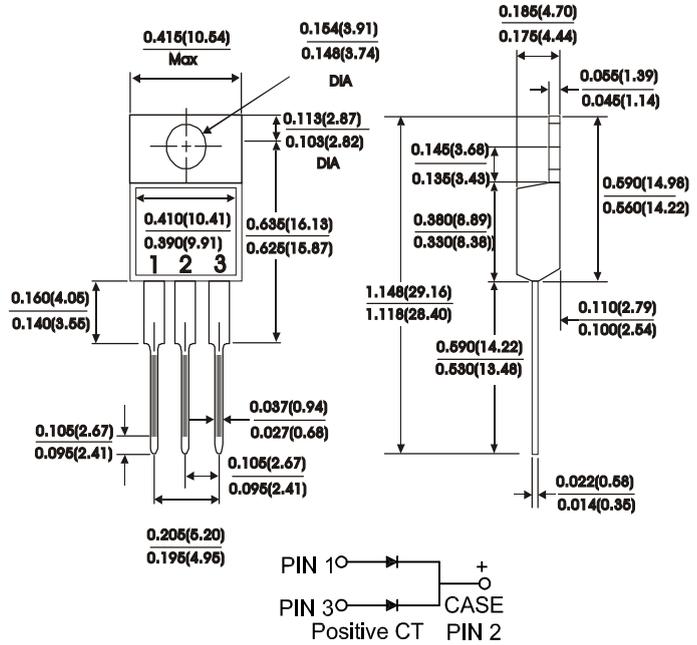
TO-220 AB

FEATURES:

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

MECHANICAL DATA

Case : JEDEC TO-220AB molded plastic
 Terminals : 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



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 | SR2090CT | SR20100CT | 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 $T_C=125^\circ C$ | I_o | 20 | | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg) | I_{FSM} | 150 | | Amps |
| Maximum instantaneous forward voltage (Per leg)(NOTE 2) | V_F | $I_F=10A$ 0.80 $I_F=20A$ 0.95 | | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage(Per leg)(NOTE 2) | I_R | $T_C=25^\circ C$ 0.5 $T_C=125^\circ C$ 50 | | mA |
| Typical thermal resistance(Per leg)(NOTE 1) | R_{th-JC} | 2.0 | | °C/W |
| Operating temperature range | T_J | -65to+150 | | °C |
| Storage temperature range | T_{Stg} | -65to+175 | | °C |

NOTES:
 (1) Thermal resistance from junction to case
 (2) Pulse test : 300 us pulse width, 1% duty cycle
 (3) Marking : SR2090CT = SR2090 (Without Marking "CT")
 Symbol Marking



RATINGS AND CHARACTERISTIC CURVES

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

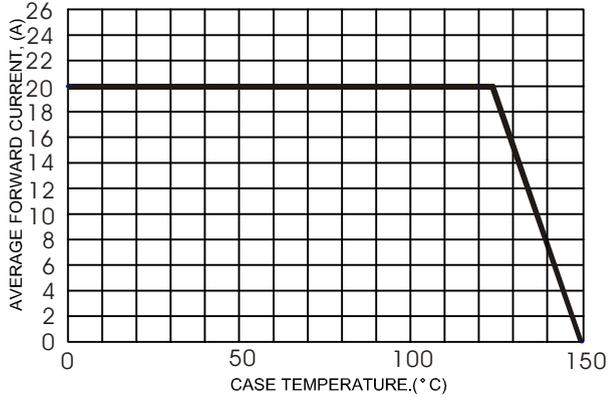


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

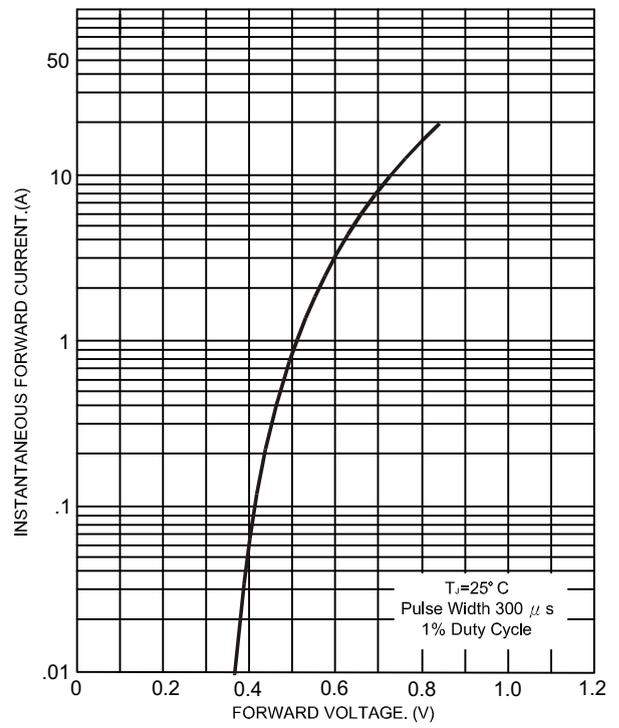


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

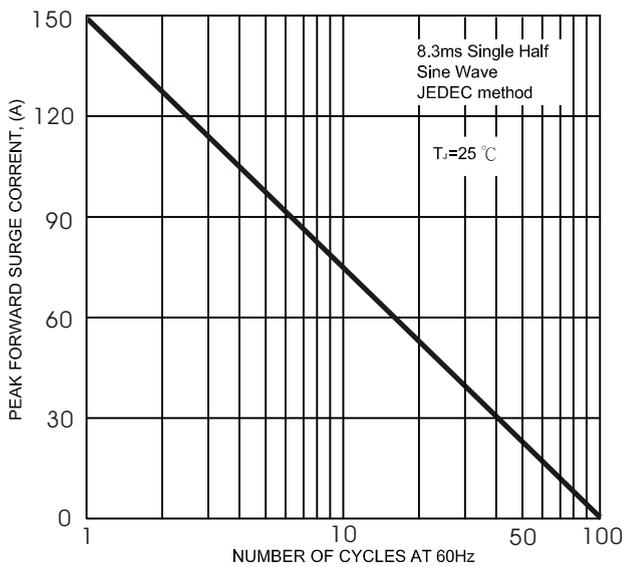
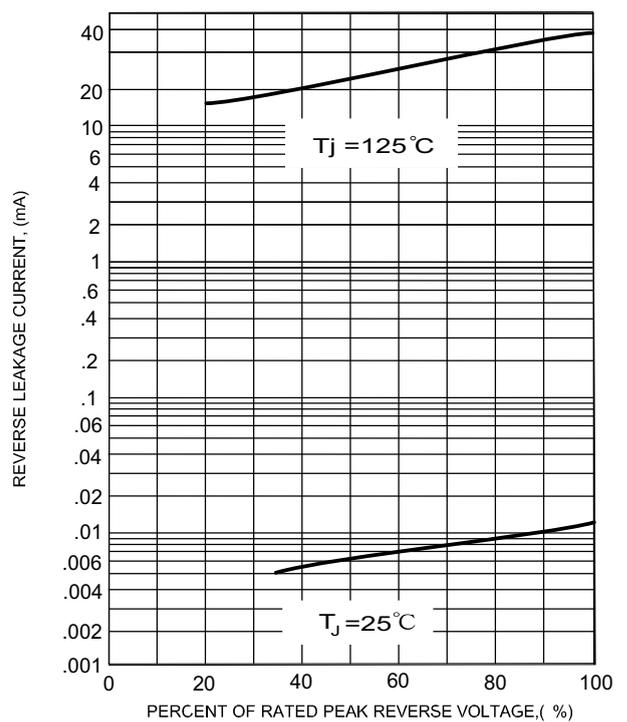


FIG.4- TYPICAL REVERSE CHARACTERISTICS





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