



SCHOTTKY BARRIER RECTIFIERS

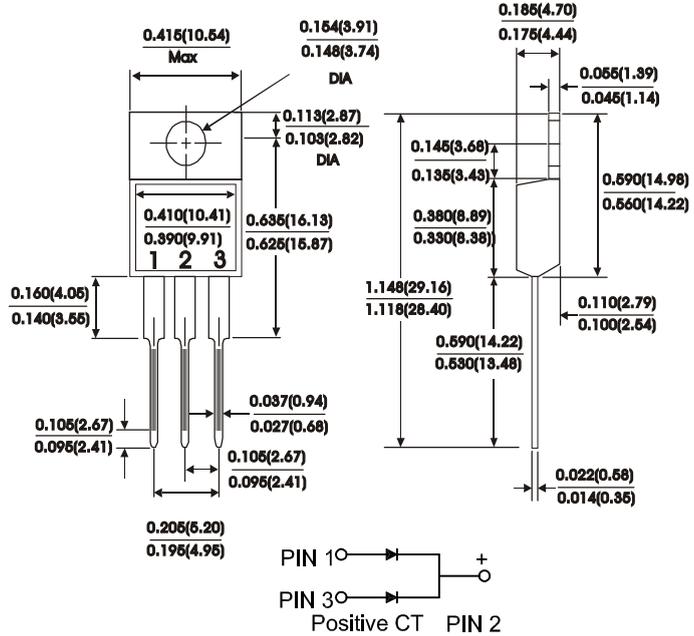
TO-220 AB

FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive centertap
- 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 Position : 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 | SR 1520CT | SR 1530CT | SR 1535CT | SR 1540CT | SR 1545CT | SR 1550CT | SR 1560CT | Units |
|---|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------|
| Maximum recurrent peak reverse voltage | V _{RRM} | 20 | 30 | 35 | 40 | 45 | 50 | 60 | Volts |
| Maximum RMS voltage | V _{RMS} | 14 | 21 | 25 | 28 | 32 | 35 | 42 | Volts |
| Maximum DC blocking voltage | V _{DC} | 20 | 30 | 35 | 40 | 45 | 50 | 60 | Volts |
| Maximum average forward rectified current at T _c = 125 °C | I _O | 15 | | | | | | | 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) I _F = 7.5A | V _F | 0.63 | | | | | 0.75 | | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage (Per leg)(NOTE 2) T _c = 25 °C T _c = 125 °C | I _R | | | | | 0.5 50 | | | mA |
| Typical thermal resistance(Per leg)(NOTE 1) | R _{th-JC} | | | | | 3.0 | | | °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 : SR1520CT = SR1520 (Without Marking "CT")
 Symbol Marking



RATINGS AND CHARACTERISTIC CURVES

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

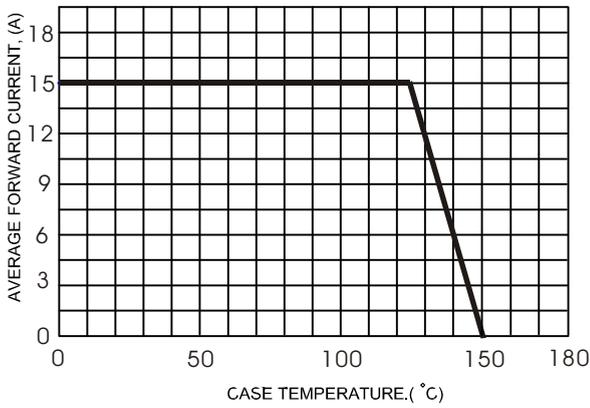


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

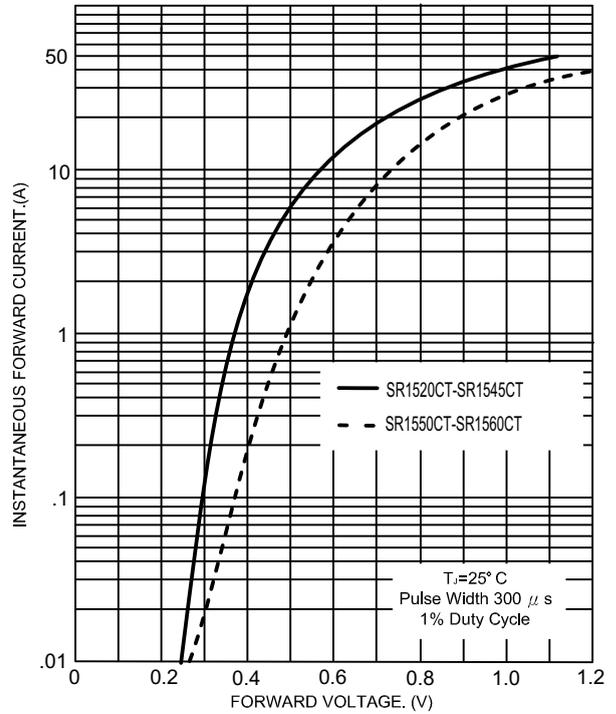


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

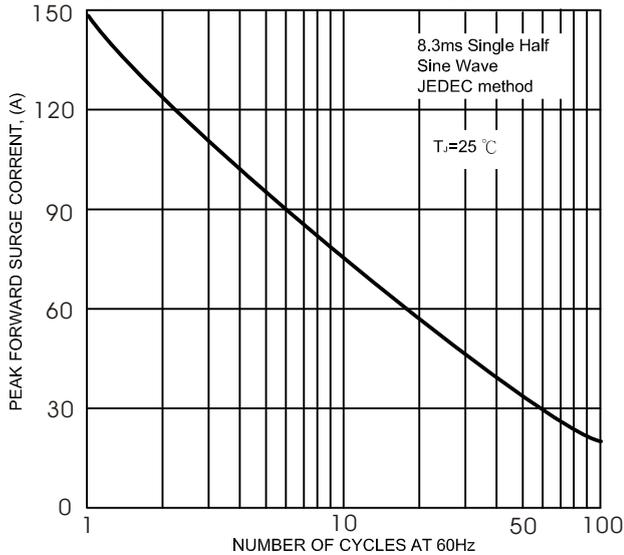


FIG.5- TYPICAL REVERSE CHARACTERISTICS

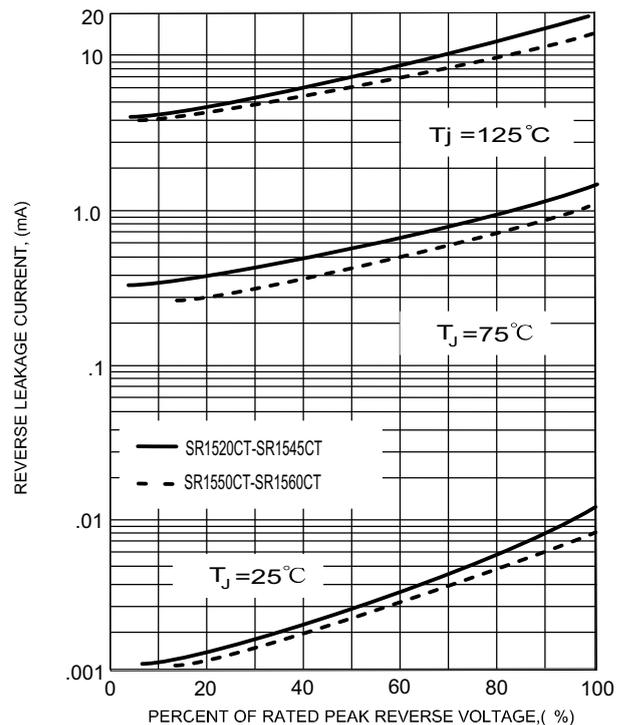
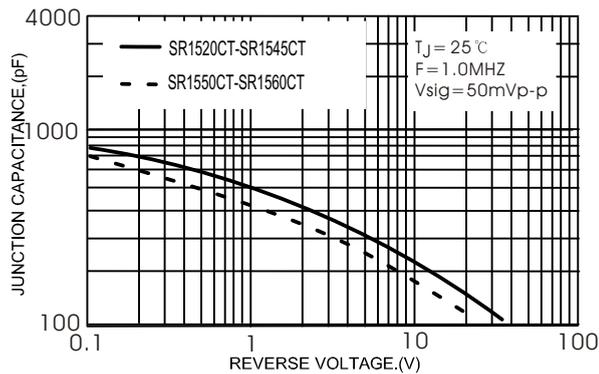


FIG.4- TYPICAL JUNCTION CAPACITANCE





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