

SRF2520CT THUR SRF2560CT

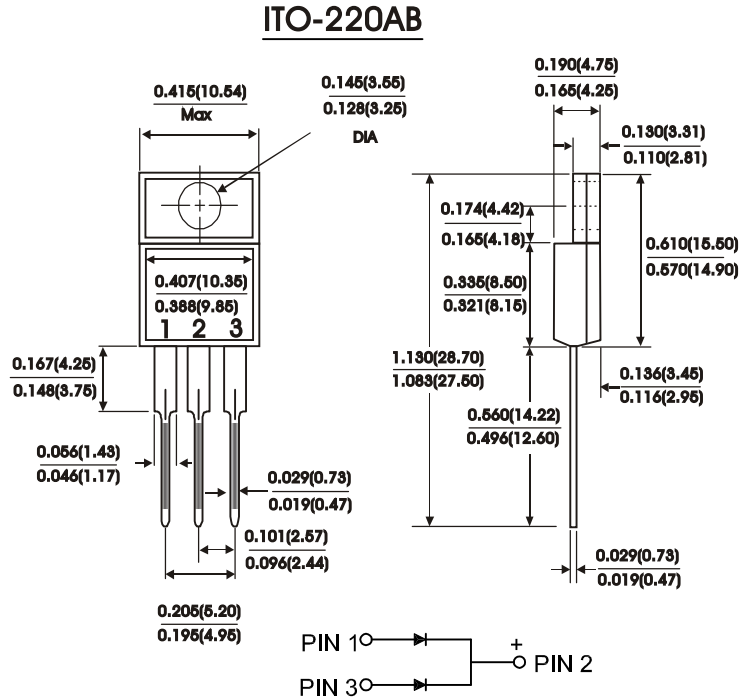
SCHOTTKY BARRIER RECTIFIERS

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 ITO-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



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 | SRF 2520CT | SRF 2530CT | SRF 2535CT | SRF 2540CT | SRF 2545CT | SRF 2550CT | SRF 2560CT | 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 $T_c = 125^\circ\text{C}$ | $I_{(AV)}$ | 25 | | | | | | | 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) $I_F = 12.5\text{A}$ | V_F | 0.63 | | | | | 0.75 | | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage (Per leg)(NOTE 2) $T_c = 25^\circ\text{C}$ $T_c = 125^\circ\text{C}$ | I_R | 0.5 50 | | | | | 1.0 50 | | mA |
| Typical thermal resistance (Per leg)(NOTE 1) | R_{th-JC} | 4.5 | | | | | | | $^\circ\text{C/W}$ |
| Operating temperature range | T_J | -65to +150 | | | | | | | $^\circ\text{C}$ |
| Storage temperature range | T_{Stg} | -65to +175 | | | | | | | $^\circ\text{C}$ |

NOTES:
 (1) Thermal resistance from junction to case
 (2) Pulse test : 300 us pulse width, 1% duty cycle
 (3) Marking : $\frac{\text{SRF2520CT}}{\text{Symbol}} = \frac{\text{SRF2520}}{\text{Marking}}$ (Whitout Marking "CT")

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

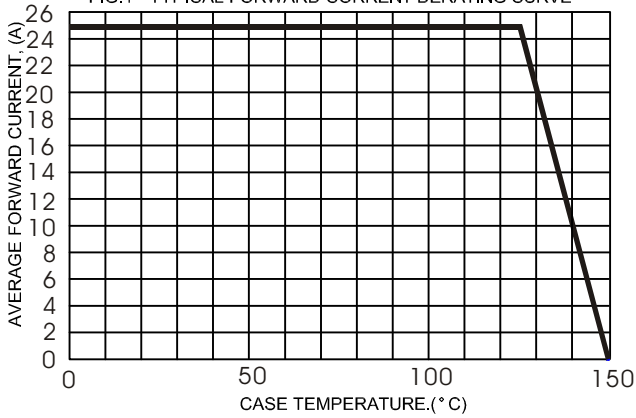


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

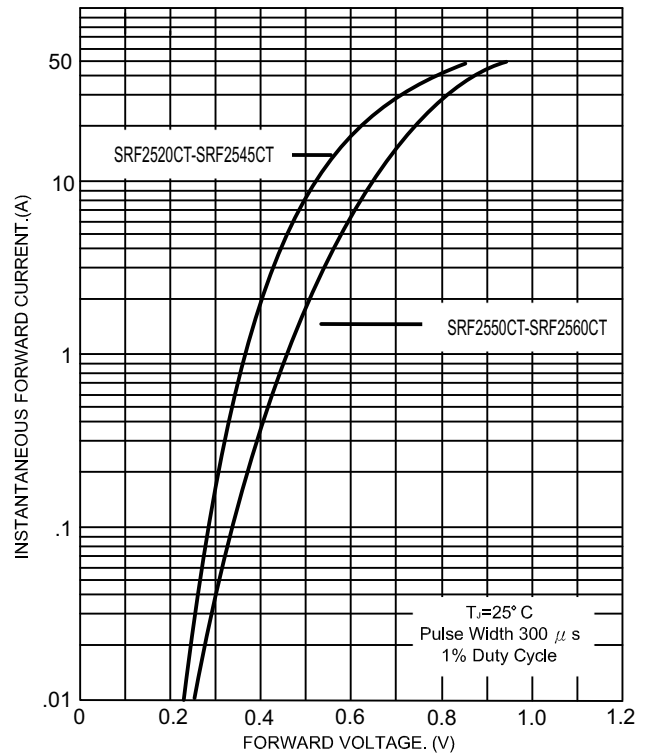


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

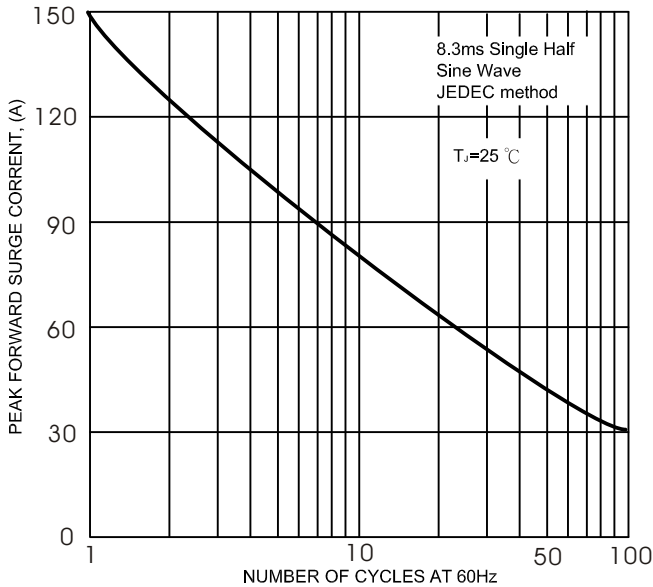


FIG.5- TYPICAL REVERSE CHARACTERISTICS

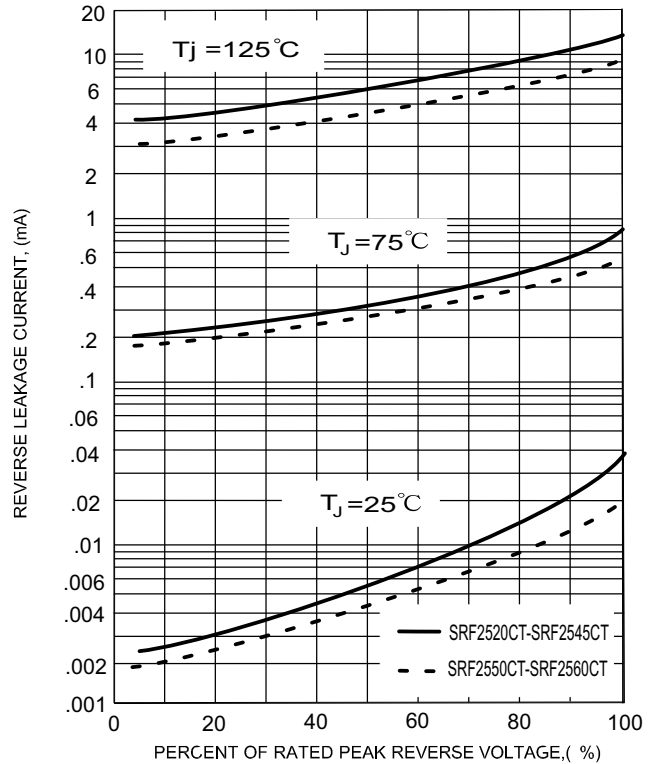


FIG.4- TYPICAL JUNCTION CAPACITANCE

