

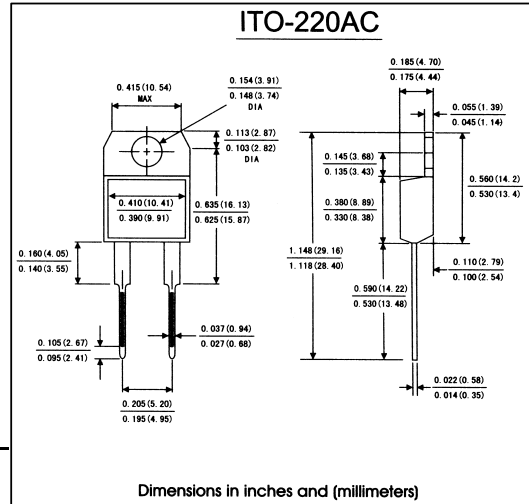
FEATURES

- . Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- . Metal silicon junction ,majority carrier conduction
- . Guard ring for overvoltage protection
- . Low power loss,high efficiency
- . High current capability ,Low forward voltage drop
- . Single rectifier construction
- . High surge capability
- . For use in low voltage ,high frequency inverters, free wheeling , and polarity protection applications
- . High temperature soldering guaranteed: 250°C/10 seconds

0.25"(6.35mm)from case

MECHANICAL DATA

- . **Case:** JEDEC DO-220AC molded plastic body
- . **Terminals:** lead solderable per MIL-STD-750,method 2026
- . **Polarity:** As marked
- . **Mounting Position:** Any
- . **Weight:** 0.08 ounce, 2.24 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified,Single phase,half wave,resistive or inductive)

load. For capacitive load,derate by 20%)

| | Symbols | SRF735 | SRF745 | SRF750 | SRF760 | Units |
|--|------------------------------|-------------|--------|--------|--------|-------|
| Maximum repetitive peak reverse voltage | V _{RRM} | 35 | 45 | 50 | 60 | Volts |
| Maximum RMS voltage | V _{RMS} | 25 | 32 | 35 | 42 | Volts |
| Maximum DC blocking voltage | V _{DC} | 35 | 45 | 50 | 60 | Volts |
| Macimum average forward rectified current(see Fig.1) | I _(AV) | 7.5 | | | | Amps |
| Repetitive peak forward current(square wavr, 20KHz) at T _c =105°C | I _{FRM} | 15.0 | | | | Amps |
| Peak forward surge current 8.3ms singel half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 150.0 | | | | Amps |
| Maximum instantaneous forward voltage at 7.5 A(Note 1) | V _F | 0.65 | | 0.75 | | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage(Note 1) | I _R | 1.0 | | | | mA |
| | | 15 | | 50 | | |
| Typeical thermal resistance(Note 2) | R _θ _{JC} | 5.0 | | | | °C/W |
| Operating junction temperature range | T _J | -65 to +150 | | | | °C |
| storage temperature range | T _{STG} | -65 to +150 | | | | °C |

Notes: 1. Pulse test: 300 μ s pulse width,1% duty cycle

2.Thermal resistance from junction to case

RATINGS AND CHARACTERISTIC CURVES SRF735 THRU SRF760(SINGLE CHIP)

FIG.1-FORWARD CURRENT DERATING CURVE

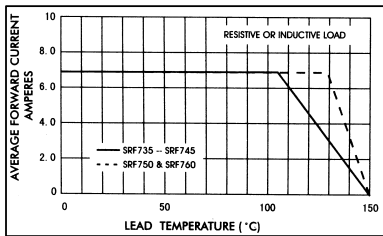


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

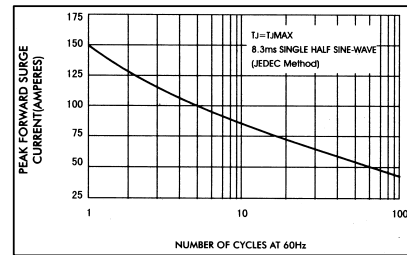


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

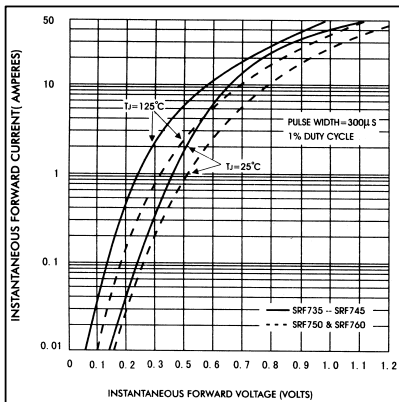


FIG.4-TYPICAL REVERSE CHARACTERISTICS

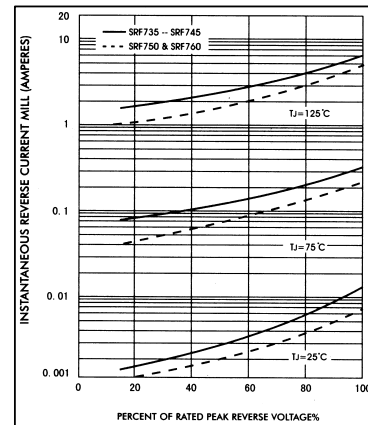


FIG.5-TYPICAL JUNCTION CAPACITANCE

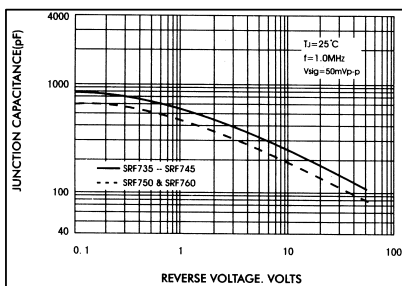


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

