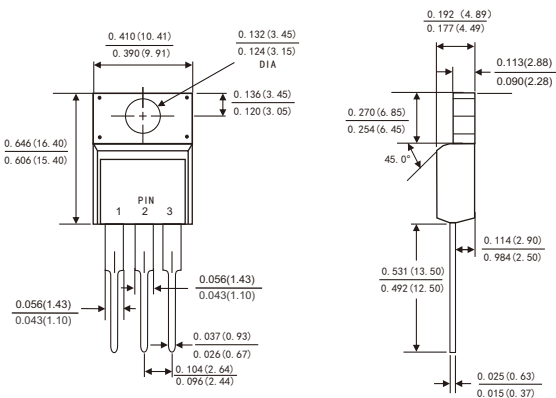


### FEATURES

- 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:260 °C/10 seconds, 0.25"(6.35mm)from case
- Component in accordance to RoHS 2011/65/EU



### ITO-220AB



### MECHANICAL DATA

- Case: JEDEC ITO-220AB molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: As marked
- Mounting Position: Any

Dimensions in inches and (millimeters)

### 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%.)

| Parameters                                                                                       | Symbols                 | SRF3045CT    | SRF3060CT | SRF30100CT | SRF30150CT | SRF30200CT | Units |
|--------------------------------------------------------------------------------------------------|-------------------------|--------------|-----------|------------|------------|------------|-------|
| Maximum repetitive peak reverse voltage                                                          | VRRM                    | 45           | 60        | 100        | 150        | 200        | Volts |
| Maximum RMS voltage                                                                              | VRMS                    | 32           | 42        | 70         | 105        | 140        | Volts |
| Maximum DC blocking voltage                                                                      | VDC                     | 45           | 60        | 100        | 150        | 200        | Volts |
| Maximum average forward rectified current See Fig. 1                                             | Per leg<br>Total device | 15.0<br>30.0 |           |            |            |            | Amps  |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM                    | 250.0        |           |            |            |            | Amps  |
| Maximum instantaneous forward voltage at 15.0 A                                                  | VF                      | 0.60         | 0.75      | 0.85       | 0.90       | 0.95       | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)                       | TA=25°C                 | 100          |           |            |            |            | μ A   |
|                                                                                                  | TA=100°C                | 5            |           |            |            |            | mA    |
|                                                                                                  | TA=125°C                | -            |           |            |            |            | mA    |
| Typical thermal resistance (Note 2)                                                              | RθJC                    | 4.5          |           |            |            |            | °C/W  |
| Operating junction temperature range                                                             | TJ                      | -55 to+150   |           |            |            |            | °C    |
| Storage temperature range                                                                        | TSTG                    | -55 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 SRF3045CT THRU SRF30200CT

FIG.1-FORWARD CURRENT DERATING CURVE

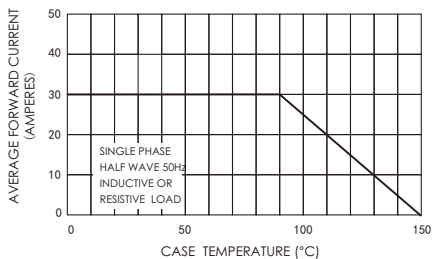


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER DIODE

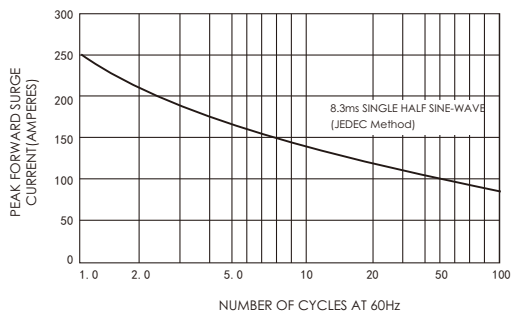


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

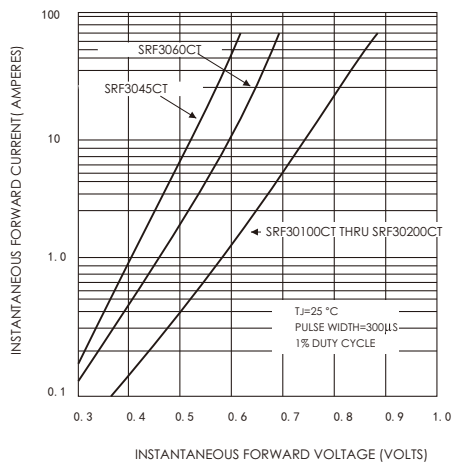


FIG.4-TYPICAL REVERSE CHARACTERISTICS

