

# SR30H90PT      THUR      SR30H100PT

## SCHOTTKY BARRIER RECTIFIERS

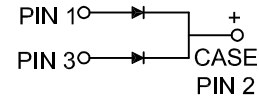
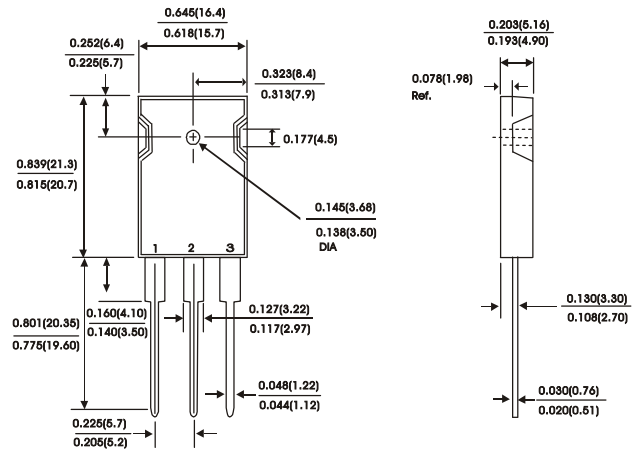
### TO-247AD/TO-3P

#### 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-3P molded plastic  
 Terminals : Leads solderable per MIL-STD-750 Method 2026  
 Polarity : As marked  
 Mounting Position : Any  
 Mounting Torque 10 in - lbs. max  
 Weight : 0.20 ounce, 5.6 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      | SR30H90PT  | SR30H100PT | Units         |
|---|-------------|------------|------------|---------------|
| Maximum recurrent peak reverse voltage  | $V_{RRM}$   | 90         | 100        | Volts         |
| Maximum RMS voltage   | $V_{RMS}$   | 64         | 70         | Volts         |
| Maximum DC blocking voltage   | $V_{DC}$    | 90         | 100        | Volts         |
| Maximum average forward rectified current at See fig. 1   | $I_O$       | 30         |            | Amps          |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)                     | $I_{FSM}$   | 265        |            | Amps          |
| Maximum instantaneous forward voltage (Per leg)(NOTE 2) $I_F = 15A$   | $V_F$       | 0.82       |            | Volts         |
| Maximum instantaneous reverse current at rated DC blocking voltage(Per leg)(NOTE 2) $T_C = 25^\circ C$<br>$T_C = 125^\circ C$ | $I_R$       | 50<br>6.0  |            | $\mu A$<br>mA |
| Typical thermal resistance(Per leg)(NOTE 1)   | $R_{th-JC}$ | 1.6        |            | °C/W          |
| Operating temperature range   | $T_J$       | -65to +175 |            | °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

# RATINGS AND CHARACTERISTIC CURVES SR30H90PT THRU SR30H100PT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

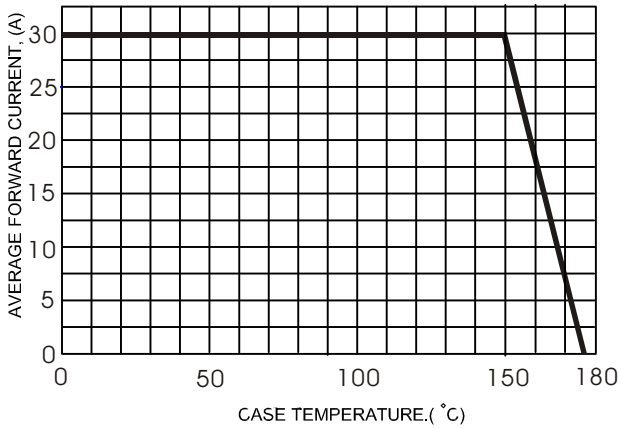


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

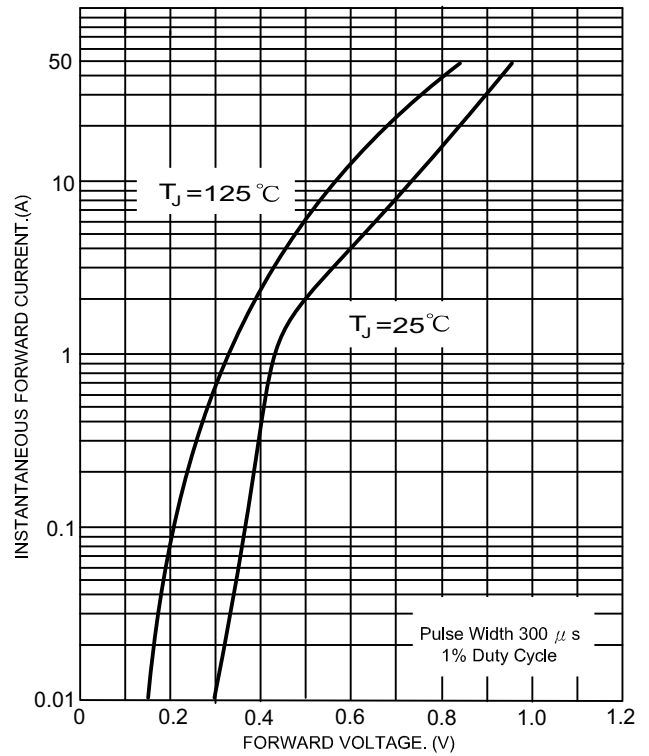


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

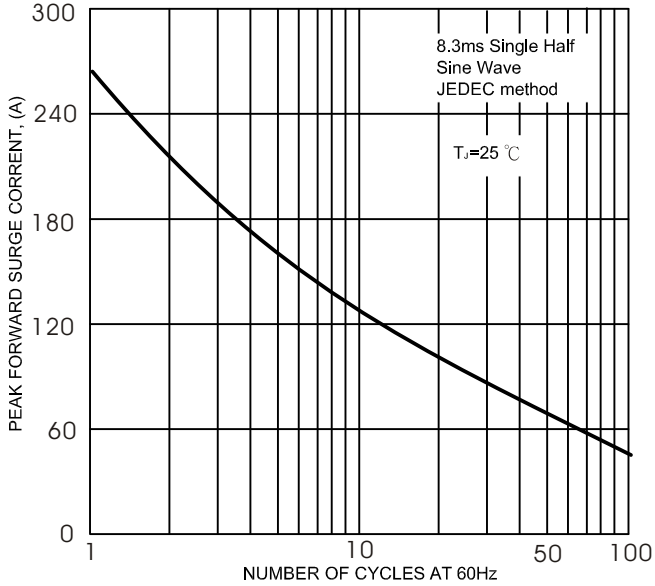


FIG.5- TYPICAL REVERSE CHARACTERISTICS

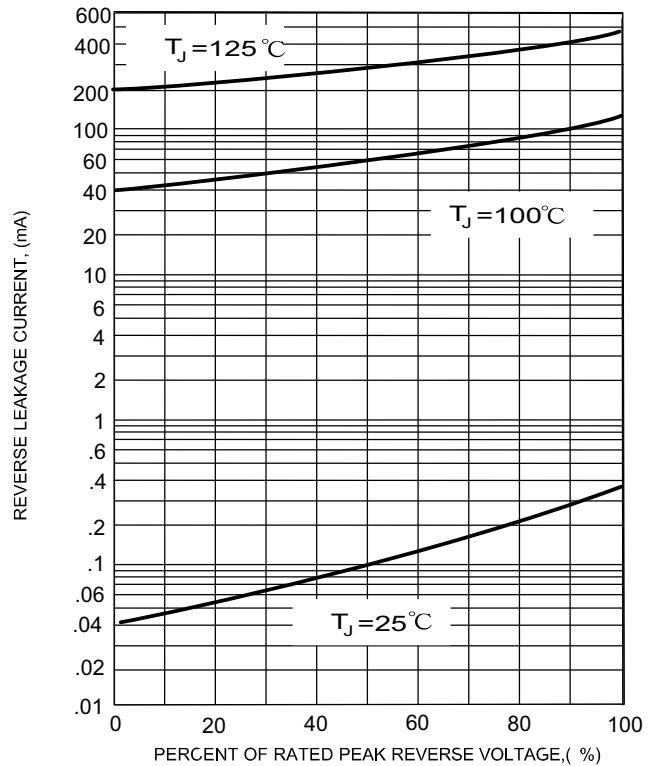


FIG.4- TYPICAL JUNCTION CAPACITANCE

