

# SR30H2OPT      THUR      SR30H6OPT

## SCHOTTKY BARRIER RECTIFIERS

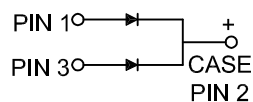
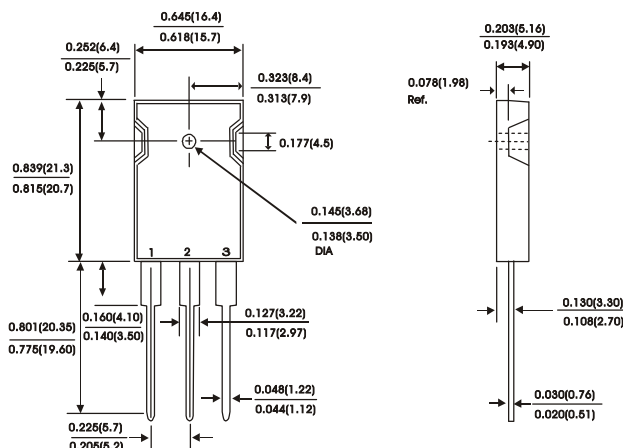
### TO-247AD/TO-3P

#### 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	SR 30H2OPT	SR 30H3OPT	SR 30H35PT	SR 30H4OPT	SR 30H45PT	SR 30H5OPT	SR 30H6OPT	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 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)	$I_{FSM}$	200							Amps
Maximum instantaneous forward voltage IF = 15A (Per leg)(NOTE 2) IF = 30A	$V_F$			0.63 0.73			0.70 0.83		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Per leg)(NOTE 2) Tc = 25 °C Tc = 125 °C	$I_R$				0.30 25				mA
Typical thermal resistance (Per leg)(NOTE 1)	$R_{th-JC}$				1.4				°C/W
Operating temperature range	$T_J$				-65 to +175				°C
Storage temperature range	$T_{Stg}$				-65 to +175				°C

NOTES:

- (1) Thermal resistance from junction to case  
 (2) Pulse test : 300 us pulse width, 1 % duty cycle

# RATINGS AND CHARACTERISTIC CURVES SR30H20PT THRU SR30H60PT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

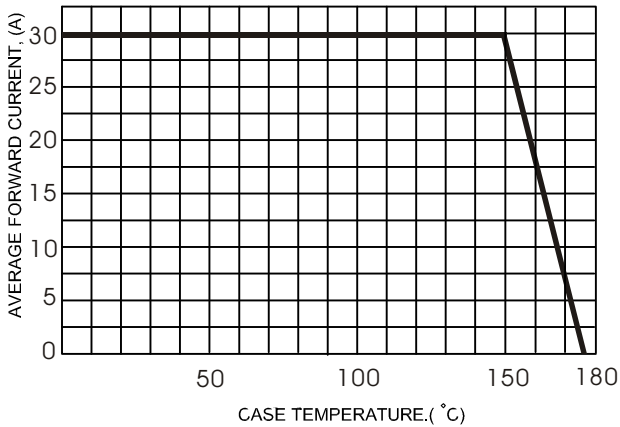


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

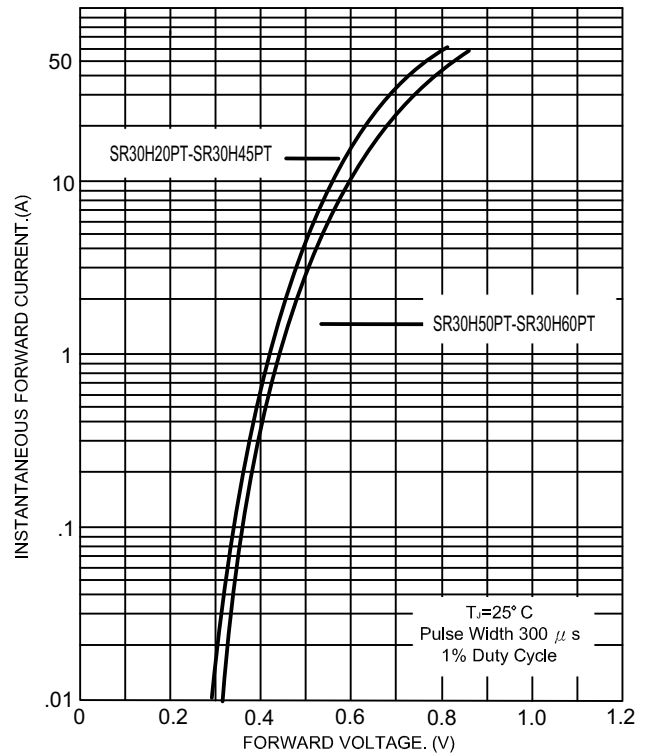


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

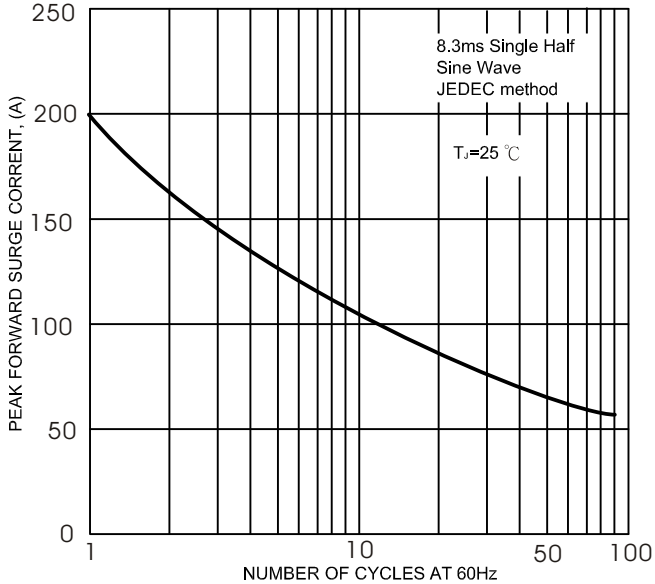


FIG.5- TYPICAL REVERSE CHARACTERISTICS

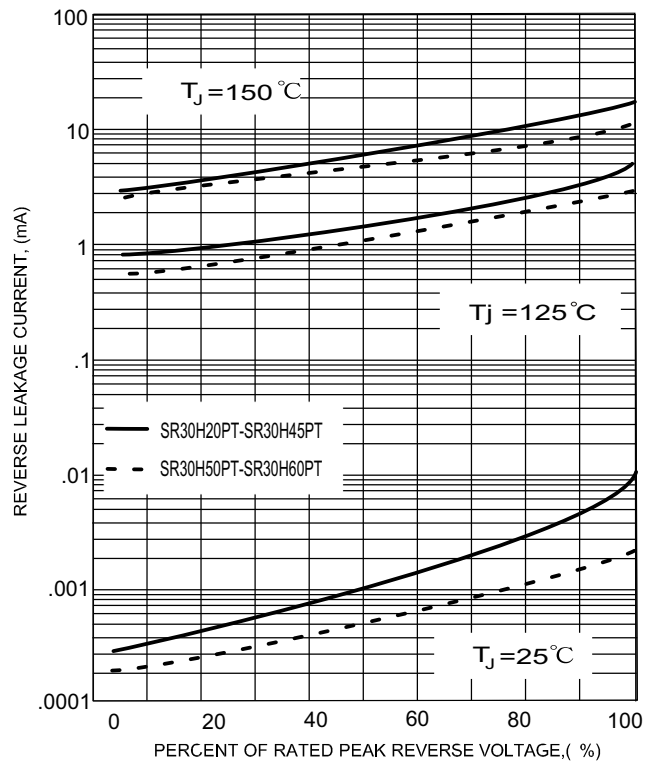


FIG.4- TYPICAL JUNCTION CAPACITANCE

