

# SR302OPT THUR SR306OPT

## SCHOTTKY BARRIER RECTIFIERS

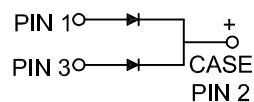
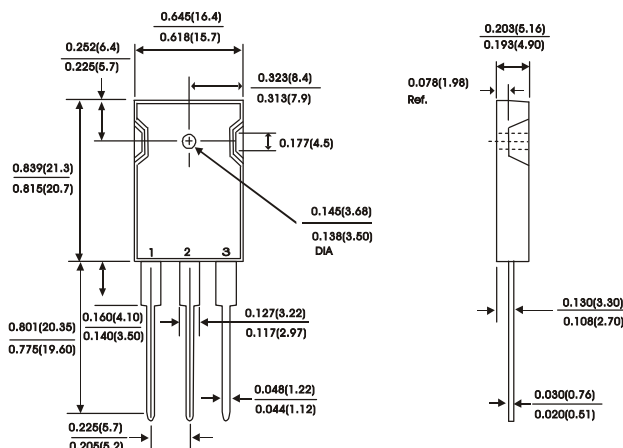
### TO-247AD

#### 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-247 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 302OPT	SR 303OPT	SR 3035PT	SR 3040PT	SR 3045PT	SR 3050PT	SR 3060PT	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	$I_{(AV)}$	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 (Per leg)(NOTE 2) $I_F = 15A$	$V_F$	0.63					0.70		Volts
Maximum instantaneous reverse current at rated DC blocking voltage (Per leg)(NOTE 2) $T_c = 25^\circ C$ $T_c = 125^\circ C$	$I_R$	1.0 60.0					5.0 100.0		mA
Typical thermal resistance(Per leg)(NOTE 1)	$R_{th-JC}$	1.4							°C/W
Operating temperature range	$T_J$	-65to +150							°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 SR3020PT THRU SR3060PT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

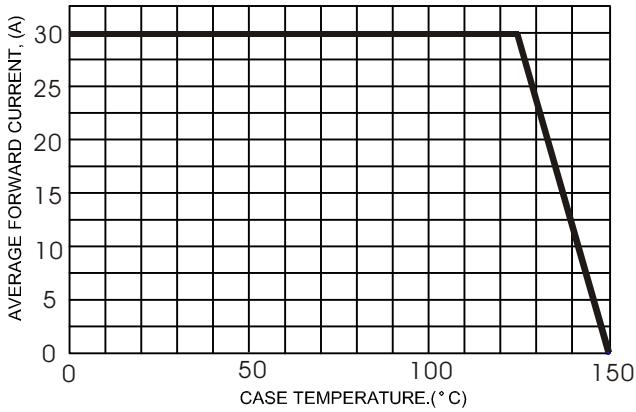


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

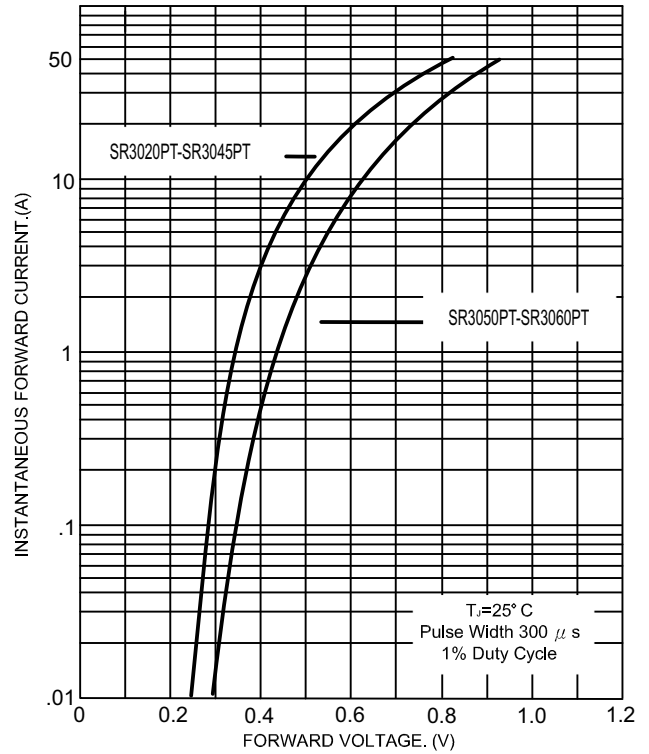


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

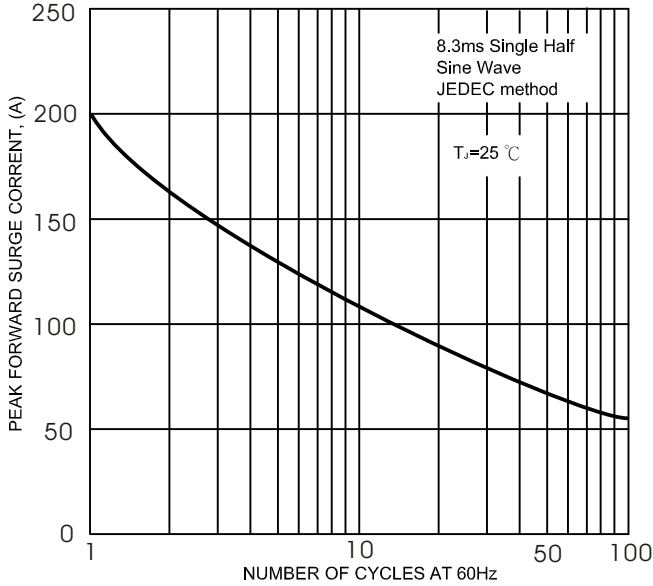


FIG.5- TYPICAL REVERSE CHARACTERISTICS

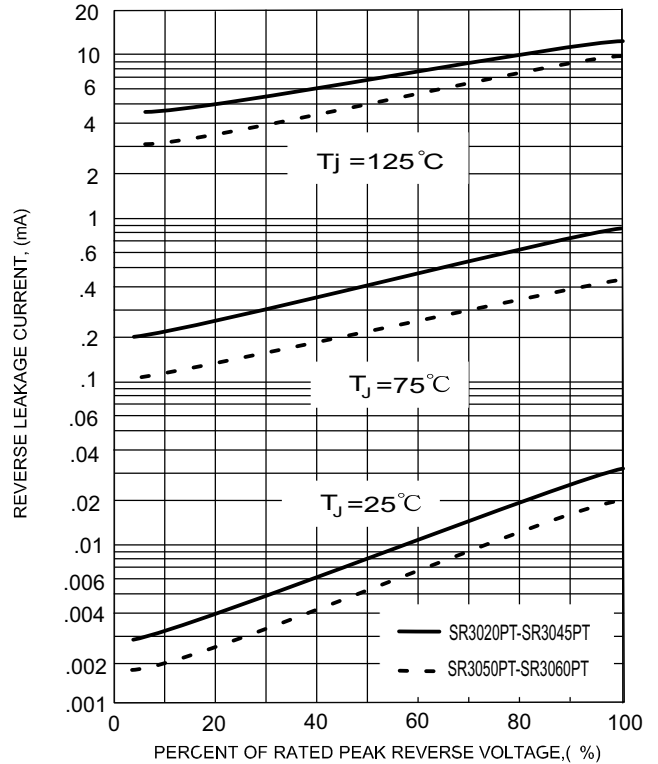


FIG.4- TYPICAL JUNCTION CAPACITANCE

