

# SRL4020PT      THUR      SRL4040PT

## SCHOTTKY BARRIER RECTIFIERS

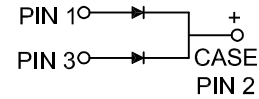
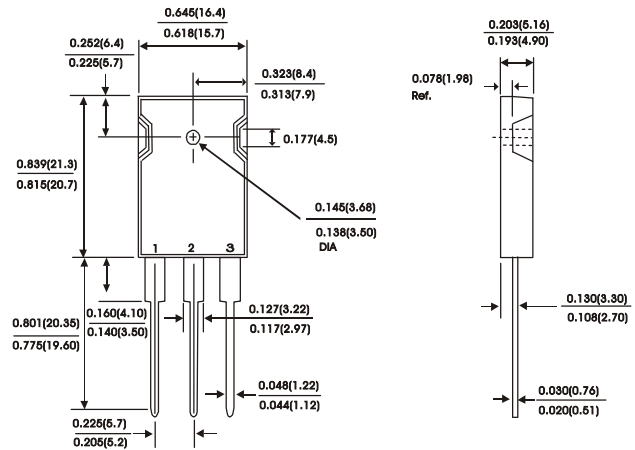
### TO-247AD/TO-3P

#### 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	SRL4020PT	SRL4030PT	SRL4040PT	Units
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	40	Volts
Maximum RMS voltage	$V_{RMS}$	14	21	28	Volts
Maximum DC blocking voltage	$V_{DC}$	20	30	40	Volts
Maximum average forward rectified current at $T_C = 105^\circ C$	$I_O$	40			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)(Per leg)	$I_{FSM}$	400			Amps
Maximum instantaneous forward voltage (Per leg)(NOTE 2) $I_F = 20A$	$V_F$	0.58			Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Per leg)(NOTE 2) $T_C = 25^\circ C$ $T_C = 100^\circ C$	$I_R$	10 100			mA
Typical thermal resistance (Per leg)(NOTE 1)	$R_{th-JC}$	1.2			°C/W
Operating temperature range	$T_J$	-40to +125			°C
Storage temperature range	$T_{Stg}$	-40to +125			°C

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

# RATINGS AND CHARACTERISTIC CURVES SRL4020PT THRU SRL4040PT

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

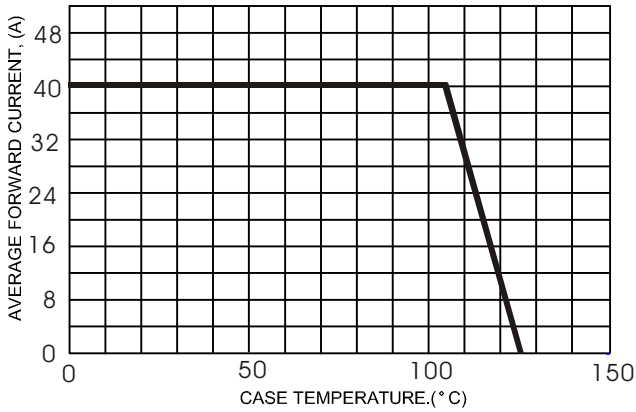


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

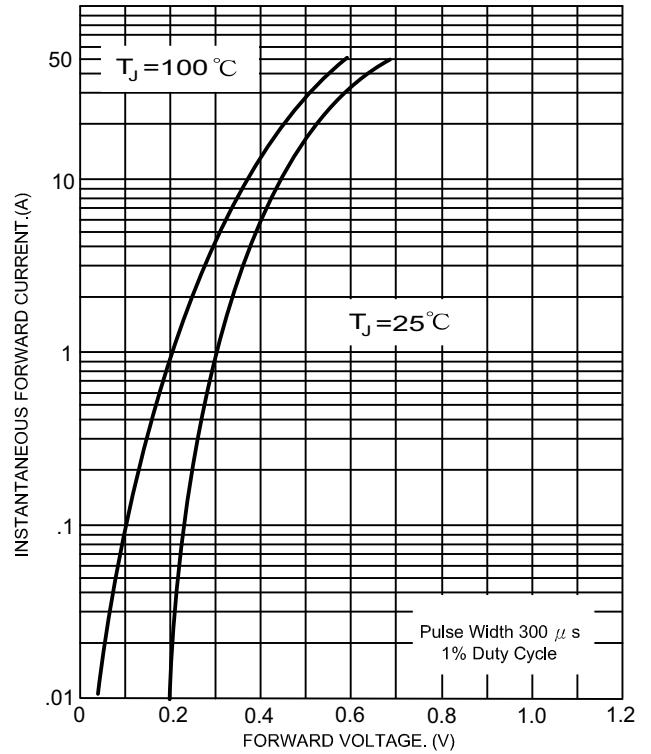


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

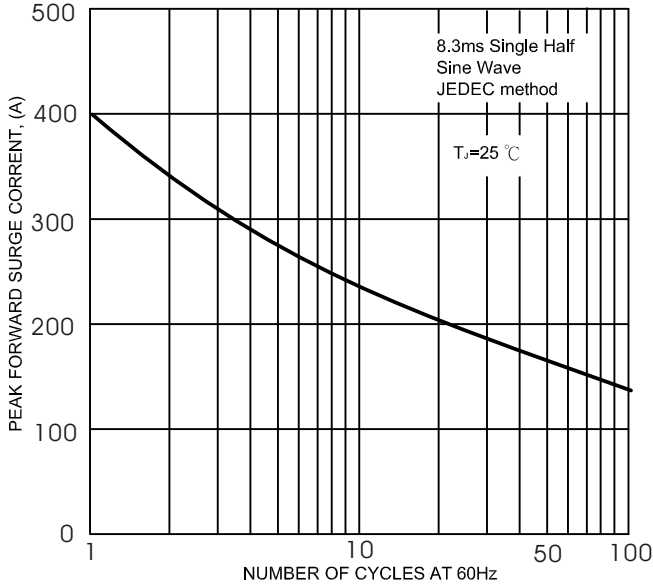


FIG.5- TYPICAL REVERSE CHARACTERISTICS

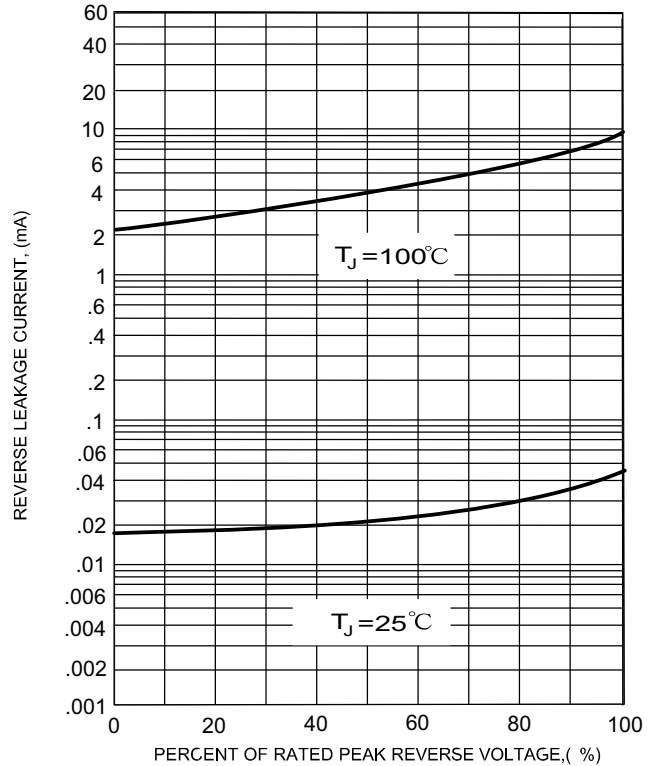


FIG.4- TYPICAL JUNCTION CAPACITANCE

