



SCHOTTKY BARRIER RECTIFIERS

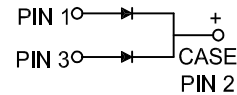
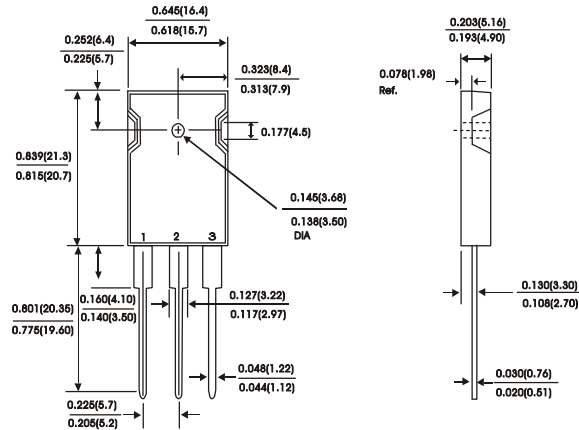
TO-247AD/TO-3P

FEATURES:

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- 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 Postifion : 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 4020PT	SR 4030PT	SR 4035PT	SR 4040PT	SR 4045PT	SR 4050PT	SR 4060PT	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 $T_c = 125^\circ C$	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	0.63					0.72		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					100		mA
Typical thermal resistance (NOTE 1)	R_{th-JC}	1.2					$^\circ C/W$		
Operating temperature range	T_J	-65to+150							$^\circ C$
Storage temperature range	T_{Stg}	-65to+175							$^\circ C$

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



RATINGS AND CHARACTERISTIC CURVES

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

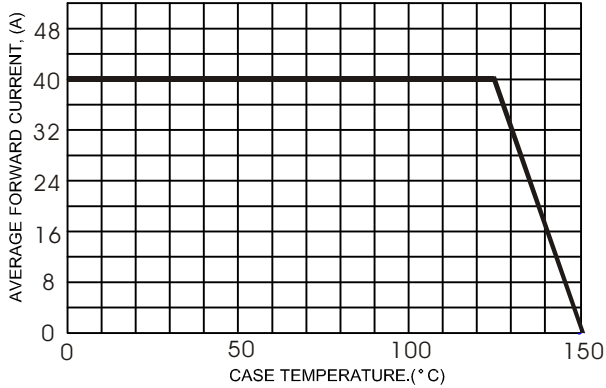


FIG.2 - TYPICAL FORWARD CHARACTERISTICS

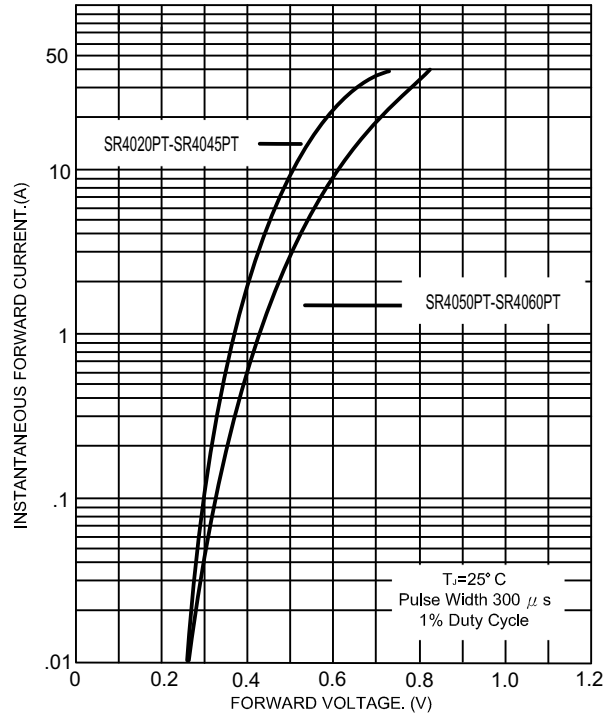


FIG.3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

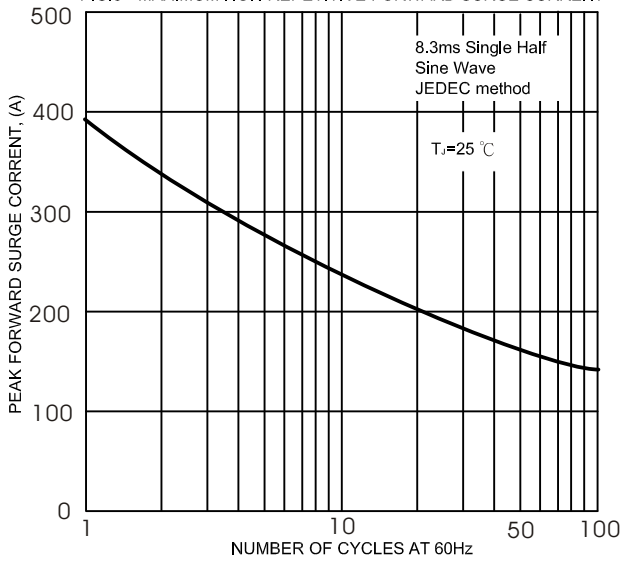


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

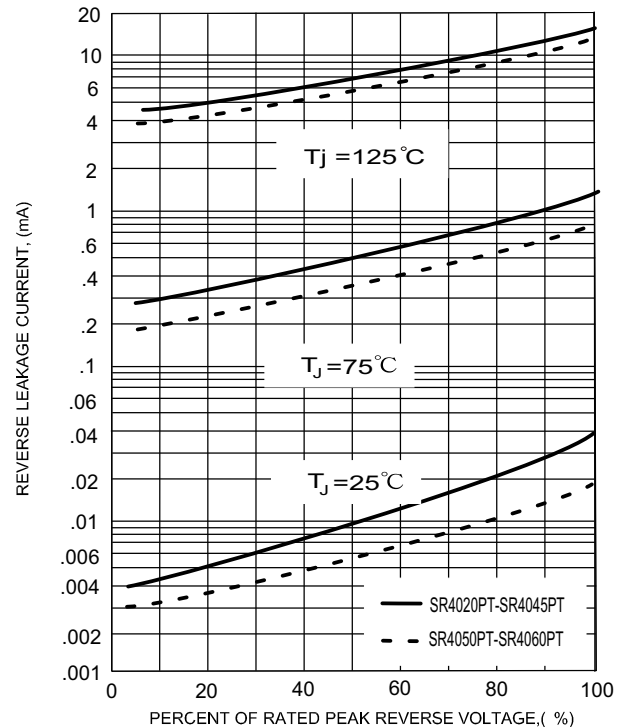
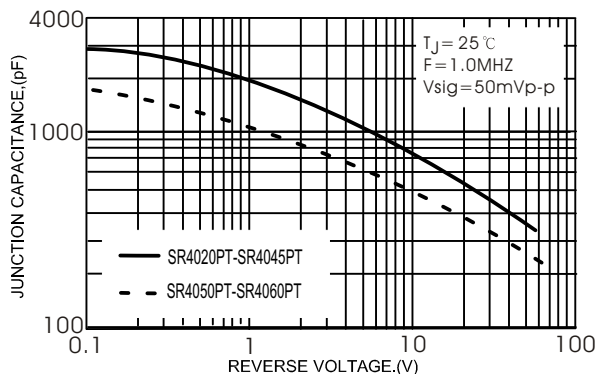


FIG.4 - TYPICAL JUNCTION CAPACITANCE





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