

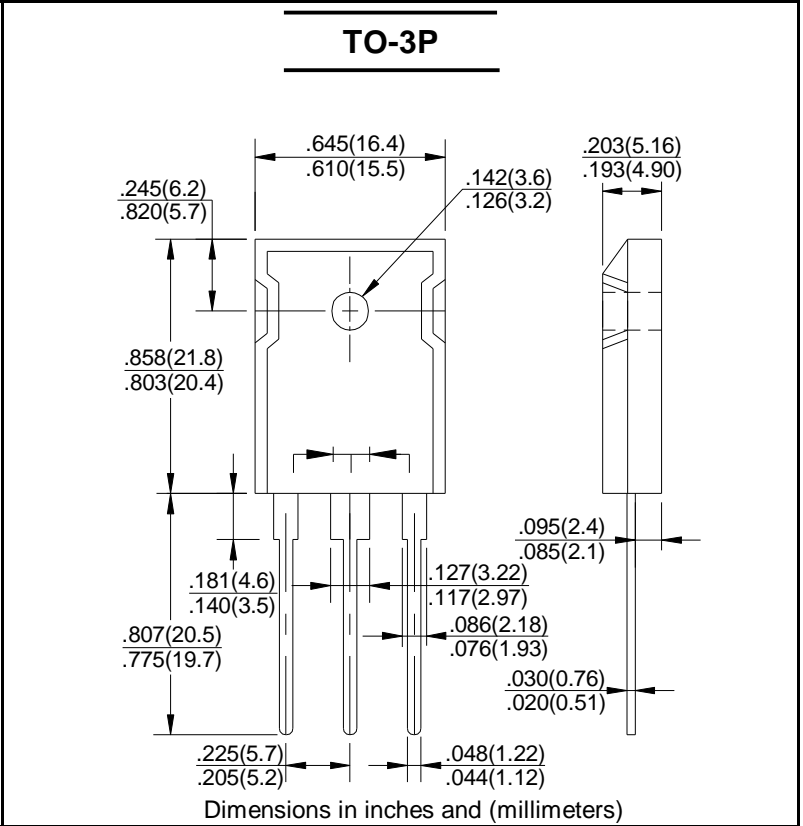
| | |
|------------------------------------|--|
| SCHOTTKY BARRIER RECTIFIERS | REVERSE VOLTAGE - 30 to 150Volts FORWARD CURRENT - 40.0 Amperes |
|------------------------------------|--|

FEATURES

- Metal of silicon rectifier , majority carrier conduction
- Guard ring for transient protection
- Low power loss,high efficiency
- High current capability,low VF
- High surge capacity
- Plastic package has UL flammability classification 94V-0
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

MECHANICAL DATA

- Case: TO-3P molded plastic
- Polarity: As marked on the body
- Weight: 0.2ounces,5.6 grams
- Mounting position :Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

| CHARACTERISTICS | SYMBOL | SR | SR | SR | SR | SR | SR | SR | UNIT | |
|--|-------------------|--------------|--------|--------|--------|--------|---------|---------|------|----|
| | | 4030PT | 4040PT | 4050PT | 4060PT | 4080PT | 40100PT | 40150PT | | |
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 30 | 40 | 50 | 60 | 80 | 100 | 150 | V | |
| Maximum RMS Voltage | V _{RMS} | 21 | 28 | 35 | 42 | 56 | 70 | 105 | V | |
| Maximum DC Blocking Voltage | V _{DC} | 30 | 40 | 50 | 60 | 80 | 100 | 150 | V | |
| Maximum Average Forward Rectified Current (See Fig.1) @T _C =100°C | I _(AV) | 40 | | | | | | | A | |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | I _{FSM} | 350 | | | | | | | A | |
| Peak Forward Voltage at 20.0A DC | V _F | 0.55 | | 0.70 | | 0.85 | | 0.95 | V | |
| Maximum DC Reverse Current @T _J =25°C at Rated DC Bolcking Voltage @T _J =100°C | I _R | 1.0 | | | | | | | 100 | mA |
| Typical Junction Capacitance (Note1) | C _J | 800 | | | | | | | pF | |
| Typical Thermal Resistance (Note2) | R _{θJC} | 1.4 | | | | | | | °C/W | |
| Operating Temperature Range | T _J | -55 to + 150 | | | | | | | °C | |
| Storage Temperature Range | T _{STG} | -55 to + 150 | | | | | | | °C | |

NOTES: 1.Measured at 1.0 MHz and applied reverse voltage of 4.0VDC.

2.Thermal resistance junction to case.

RATING AND CHARACTERISTIC CURVES
SR4030PT thru SR40150PT



FIG. 1 – FORWARD CURRENT DERATING CURVE

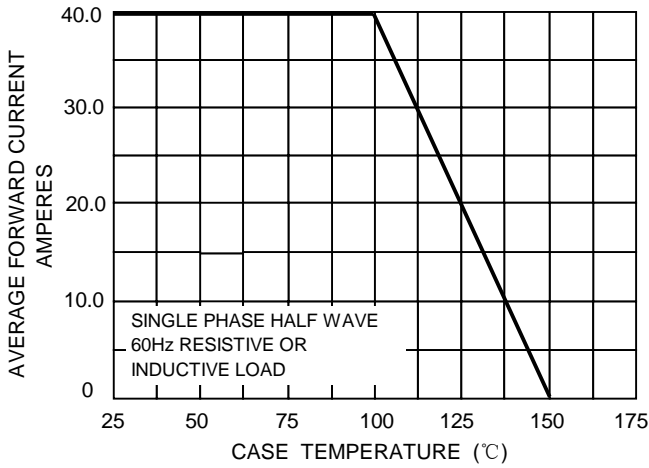


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

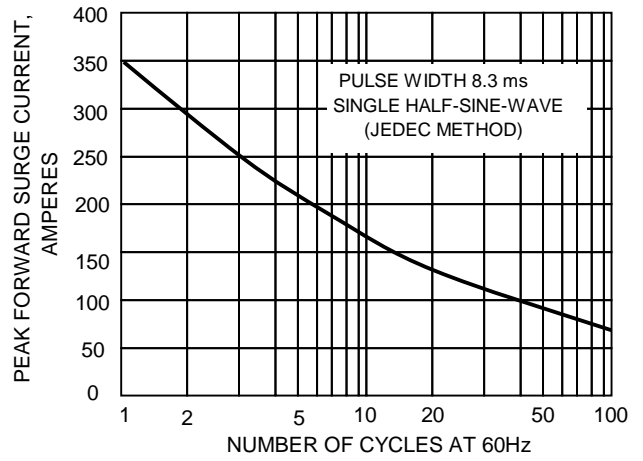


FIG.3-TYPICAL REVER CHARACTERISTICS

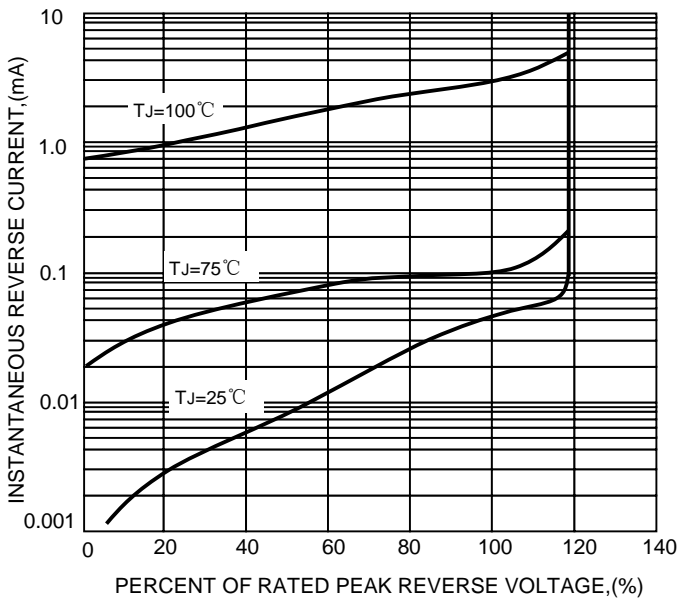


FIG.4-TYPICAL FORWARD CHARACTERISTICS

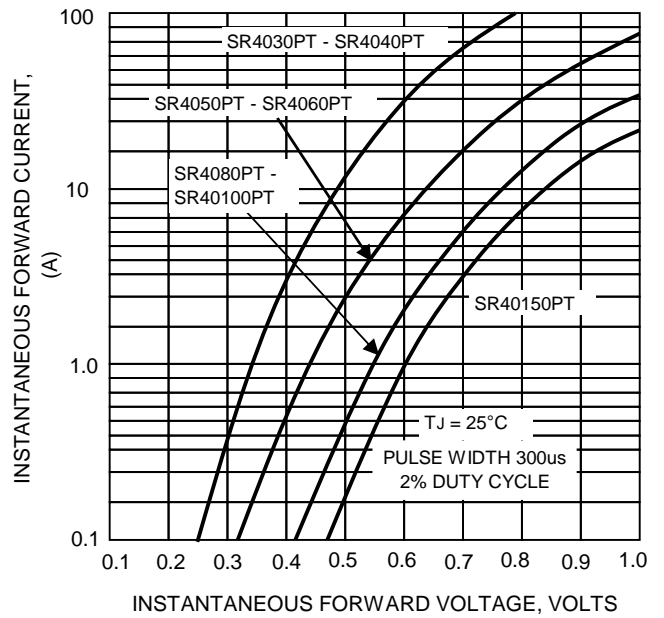


FIG.5 – TYPICAL JUNCTION CAPACITANCE

