



CHENMKO ENTERPRISE CO.,LTD

S20S20PT

Lead free devices

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 Volts CURRENT 20 Amperes

FEATURES

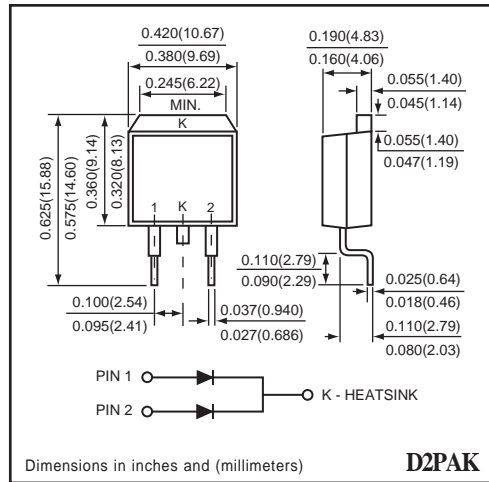
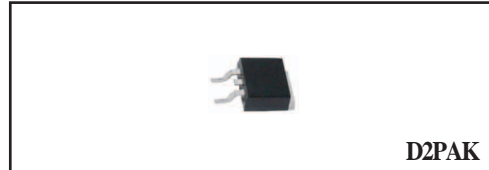
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Metal Silicon junction, majority carrier conduction
- * Low power loss,high efficiency
- * High current capability, low forward voltage drop
- * Guardring for overvoltage protection
- * For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- * High temperature soldering in accordance with CECC 802 / Reflow guaranteed

MECHANICAL DATA

Case: JEDEC D2PAK molded plastic
Terminals: Lead solderable per MIL-STD-750, Method 2026
Polarity: As marked
Weight: 0.08 ounces, 2.24 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.



MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

| RATINGS | SYMBOL | S20S20PT | UNITS |
|---|-----------------------------------|-------------|--------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 20 | Volts |
| Maximum RMS Voltage | V _{RMS} | 14 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 20 | Volts |
| Maximum Average Forward Rectified Current | I _O | 20 | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 150 | Amps |
| Typical thermal resistance per leg (NOTE 1) | R _{θJC} | 2.0 | °C / W |
| Operating and Storage Temperature Range | T _J , T _{STG} | -65 to +125 | °C |

ELECTRICAL CHARACTERISTICS (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS | SYMBOL | S20S20PT | UNITS |
|---|------------------------|----------|-------|
| Maximum Instantaneous Forward Voltage at 10 A DC | V _F | 0.55 | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage per leg (NOTE 2) | T _C = 25°C | 1.0 | mAmps |
| | T _C = 100°C | 50 | mAmps |

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

RATING CHARACTERISTIC CURVES (S20S20PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

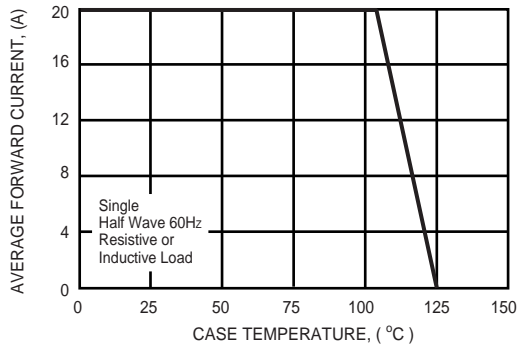


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

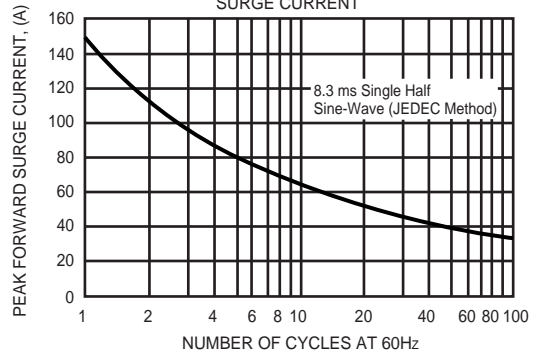


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

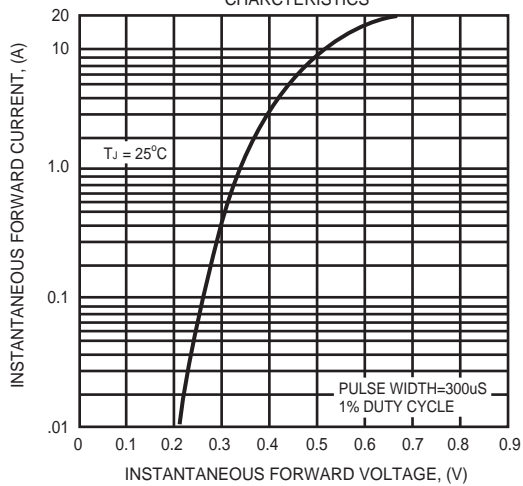


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

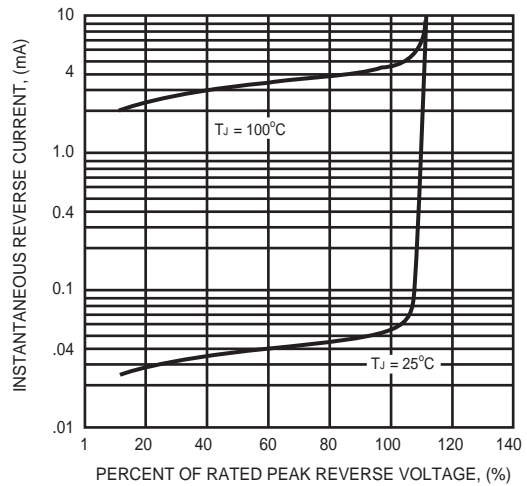


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

