



CHENMKO ENTERPRISE CO.,LTD

**S30S20PT
THRU
S30S60PT**

Lead free devices

SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE 20 - 60 Volts CURRENT 30 Amperes

FEATURES

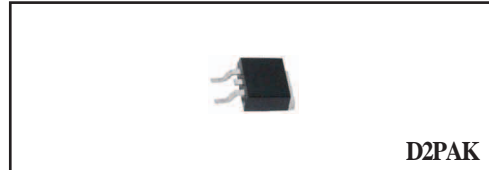
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- * Metal Silicon junction, majority carrier conduction
- * Low power loss,high efficiency
- * High current capability, low forward voltage drop
- * Guardring for overvoltage protection
- * For use in low voltage, high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

MECHANICAL DATA

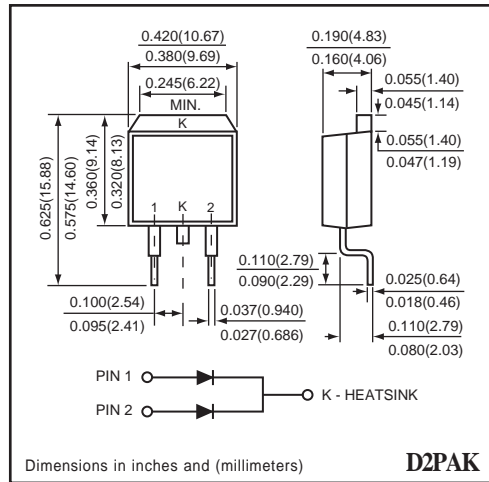
Case: JEDEC D2PAK molded plastic
Terminals: Lead solderable per MIL-STD-750, Method 2026
Polarity: As marked
Weight: 0.08 ounces, 2.24 grams

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%.



D2PAK



Dimensions in inches and (millimeters)

D2PAK

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

| RATINGS | SYMBOL | S30S20PT | S30S30PT | S30S35PT | S30S40PT | S30S45PT | S30S50PT | S30S60PT | UNITS |
|---|----------|-------------|----------|----------|----------|----------|-------------|----------|--------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 20 | 30 | 35 | 40 | 45 | 50 | 60 | Volts |
| Maximum RMS Voltage | VRMS | 14 | 21 | 24 | 28 | 31 | 35 | 42 | Volts |
| Maximum DC Blocking Voltage | VDC | 20 | 30 | 35 | 40 | 45 | 50 | 60 | Volts |
| Maximum Average Forward Rectified Current | Io | 30 | | | | | | | Amps |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | IFSM | 200 | | | | | | | Amps |
| Typical thermal resistance per leg (NOTE 1) | R θJC | 1.5 | | | | | | | °C / W |
| Operating and Storage Temperature Range | TJ, TSTG | -65 to +125 | | | | | -65 to +150 | | °C |

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

| CHARACTERISTICS | SYMBOL | S30S20PT | S30S30PT | S30S35PT | S30S40PT | S30S45PT | S30S50PT | S30S60PT | UNITS |
|---|------------|----------|----------|----------|----------|----------|----------|----------|-------|
| Maximum Instantaneous Forward Voltage at 15 A DC | VF | 0.55 | | | | | 0.70 | | Volts |
| Maximum instantaneous reverse current at rated DC blocking voltage per leg (NOTE 2) | Tc = 25°C | 1.0 | | | | | | | mAmps |
| | Tc = 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 (S30S20PT THRU S30S60PT)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

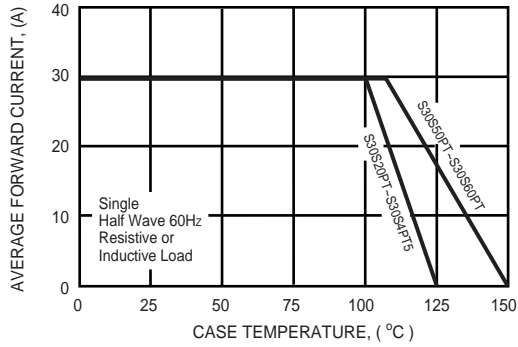


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

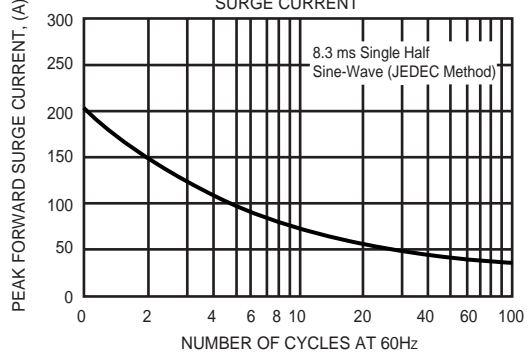


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

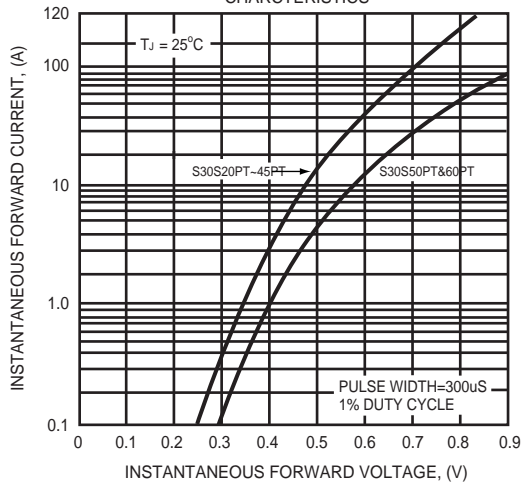


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

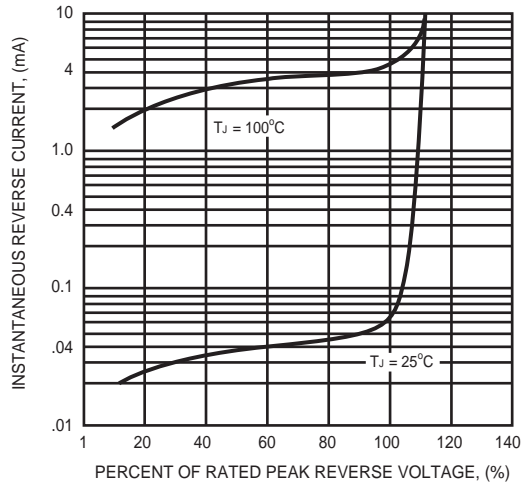


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

