



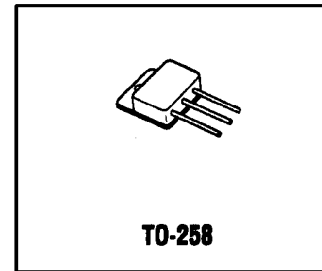
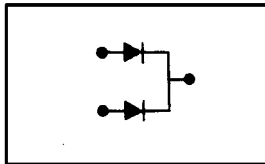
NES
NEW ENGLAND SEMICONDUCTOR

NS4202SCT

POWER RECTIFIERS

- Schottky Diode - Center Tap
- Low Forward Voltage (0.64 max @ 16A)
- Matched Dual Die Construction (15A per leg)
- Epitaxial Construction
- 150°C Operating Temperature

**SCHOTTKY BARRIER
RECTIFIERS
30 AMPERES**



MAXIMUM RATINGS (PER LEG)

| Rating | Symbol | Value | Unit |
|---|-------------|-------------|------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 50 | Volts |
| Working Peak Reverse Voltage | V_{RWM} | 45 | |
| DC Blocking Voltage | V_R | 45 | |
| Average Rectified Forward Current (Rated V_R) $T_C = 110^\circ C$ | $I_{F(AV)}$ | 30 | Amps |
| Peak Repetitive Forward Current, Per Leg (Rated V_R , Square Wave, 20 kHz) $T_C = 95^\circ C$ | I_{FRM} | 15 | Amps |
| Nonrepetitive Peak Surge Current (Surge applied at rated load conditions, halfwave, single phase, 60 Hz) | I_{FSM} | 150 | Amps |
| Operating Junction Temperature | T_J | -55 to +150 | $^\circ C$ |
| Storage Temperature | T_{stg} | -55 to +150 | $^\circ C$ |

THERMAL CHARACTERISTICS

| | | | |
|--|-----------------|-----|--------------|
| Thermal Resistance -- Junction to Case | $R_{\theta JC}$ | 3.0 | $^\circ C/W$ |
|--|-----------------|-----|--------------|

ELECTRICAL CHARACTERISTICS

| | | | |
|---|-------|----------------------|-------|
| Maximum Instantaneous Forward Voltage (1) ($I_F = 10$ Amps, $T_J = 25^\circ C$) ($I_F = 16$ Amps, $T_J = 25^\circ C$) ($I_F = 16$ Amps, $T_J = 125^\circ C$) | V_F | 0.57 0.64 0.58 | Volts |
| Maximum Instantaneous Reverse Current (1) (Rated dc Voltage, $T_J = 25^\circ C$) (Rated dc Voltage, $T_J = 125^\circ C$) | i_R | 1.0 50.0 | mA |

(1) Pulse Test: Pulse Width = 300 μs , Duty Cycle $\leq 2.0\%$

NEW ENGLAND SEMICONDUCTOR

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T4-4.8-860-1300 REV: --