



NES

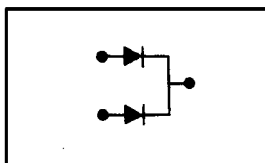
NEW ENGLAND SEMICONDUCTOR

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



TO-258

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) $T_C = 110^\circ\text{C}$	$I_{F(AV)}$	30	Amps
Peak Repetitive Forward Current, Per Leg (Rated V_R , Square Wave, 20 kHz) $T_C = 95^\circ\text{C}$	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	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

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

Maximum Instantaneous Forward Voltage (1) ($I_F = 10$ Amps, $T_J = 25^\circ\text{C}$) ($I_F = 16$ Amps, $T_J = 25^\circ\text{C}$) ($I_F = 16$ Amps, $T_J = 125^\circ\text{C}$)	V_F	0.57 0.64 0.58	Volts
Maximum Instantaneous Reverse Current (1) (Rated dc Voltage, $T_J = 25^\circ\text{C}$) (Rated dc Voltage, $T_J = 125^\circ\text{C}$)	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: --