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NTE6090 Silicon Dual Power Rectifier 45V, 30 Amp TO-3P Type Package

Features:

- Schottky Barrier Chip
- Guard Ring for Transient Protection
- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Surge Current Capability

Maximum Ratings and Electrical Characteristics: ($T_A = +25^\circ\text{C}$ unless otherwise specified. Single Phase, half-wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%)

Peak Repetitive Reverse Voltage, V_{RRM}	45V
Working Peak Reverse Voltage, V_{RWM}	45V
DC Blocking Voltage, V_R	45V
RMS Reverse Voltage, $V_{R(RMS)}$	32V
Average Rectified Output Current ($T_C = +100^\circ\text{C}$), I_O	
Per Device	30A
Per Diode	15A
Non-Repetitive Peak Forward Surge Current, I_{FSM} (8.3ms Single Half Sine-Wave Surge Superimposed on Rated Load)	250A
Forward Voltage Drop (Per Diode, $I_F = 15\text{A}$), V_{FM}	
$T_J = +25^\circ\text{C}$	0.55V
$T_J = +125^\circ\text{C}$	0.50V
Peak Reverse Current ($V_R = 45\text{V}$), I_{RM}	
$T_J = +25^\circ\text{C}$	1.0mA
$T_J = +100^\circ\text{C}$	20mA
Typical Junction Capacitance (Note 1), C_J	750pF
Operating Junction Temperature Range, T_J	-55° to $+150^\circ\text{C}$
Storage Temperature Range, T_{stg}	-55° to $+150^\circ\text{C}$
Peak Surge Junction Temperature (Forward Current Applied), $T_{J(pk)}$	$+175^\circ\text{C}$
Thermal Resistance, Junction-to-Case (Per Diode), R_{thJC}	1.4°C/W
Thermal Resistance, Junction-to-Ambient (Per Diode), R_{thJA}	40°C/W

Note 1. Measured at 1MHz and applied reverse voltage of 4.0V DC.

TO3P Type Package

