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NTE6087 Dual Schottky Barrier Silicon Rectifier 45V, 30 Amp, TO220

Features:

- Guarding for Stress Protection
- Low Forward Voltage
- +150°C Operating Junction Temperature
- Guaranteed Reverse Avalanche

Absolute Maximum Ratings:

Peak Repetitive Reverse Voltage, V_{RRM}	45V
Working Peak Reverse Voltage, V_{RWM}	45V
DC Blocking Voltage, V_R	45V
Average Rectified Forward Current ($V_R = 45V, T_C = +130^\circ C$), $I_{F(AV)}$	30A
Peak Repetitive Forward Current, I_{FRM} (Per Diode Leg, $V_R = 45V$, Square Wave, 20kHz, $T_C = +130^\circ C$)	30A
Non-Repetitive Peak Surge Current, I_{FSM} (Per Diode Leg, Surge applied at rated load conditions halfwave, single phase, 60Hz)	150A
Peak Repetitive Reverse Surge Current (2 μ s, 1kHz), I_{RRM}	1A
Voltage Rate of Change ($V_R = 45V$), dv/dt	1000V/ μ s
Operating Junction Temperature Range, T_J	-65° to +150°C
Storage Temperature Range, T_{stg}	-65° to +175°C
Maximum Thermal Resistance, Junction-to-Case (Per Diode Leg), R_{thJC}	1.5°C/W

Electrical Characteristics: (Per Diode Leg)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Instantaneous Forward Voltage	v_F	$i_F = 30A, T_C = +125^\circ C$, Note 1	-	-	0.73	V
		$i_F = 30A, T_C = +25^\circ C$, Note 1	-	-	0.82	V
Instantaneous Reverse Current	i_R	$V_R = 45V, T_C = +125^\circ C$, Note 1	-	-	40	mA
		$V_R = 45V, T_C = +25^\circ C$, Note 1	-	-	0.2	mA

Note 1. Pulse test: Pulse Width = 300 μ s, Duty Cycle \leq 2%.

