



ELECTRONICS, INC.
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NTE6128 Silicon Power Rectifier Diode, 430 Amp

Features:

- Fast Recovery Time
- Soft Recovery Characteristics
- High Surge Current Rating
- High Rated Blocking Voltages

Applications:

- Inverter
- Chopper
- Transmitter
- Free-Wheeling Diode

Absolute Maximum Ratings:

RMS Forward Current, $I_{F(rms)}$	625A
Average Forward Current, $I_{F(AV)}$	430A
Maximum Repetitive Peak Reverse Voltage, V_{RRM}	1600V
Maximum Non-Repetitive Peak Reverse Voltage ($t \leq 5msec$), V_{RSM}	1800V
Maximum Reverse Current ($T_J = +150^\circ C$), I_{RRM}	50mA
Maximum Forward Surge Current (One Half Cycle), I_{FSM}	4500A
Maximum Permissible Surge Energy (8.3ms), I^2t	
For Fusing	85000A ² s
Of Package	20 x 10 ⁶ A ² s
Operating Junction Temperature Range, T_J	-40° to +150°C
Storage Temperature Range, T_{stg}	-40° to +190°C
Thermal Resistance, Junction-to-Case, R_{thJC}	0.095°C/W
Thermal Resistance, Case-to-Sink (Lubricated), R_{thCS}	0.025°C/W
Maximum Mounting Force, F	1000 to 1400 lbs.

Electrical Characteristics:

Parameter	Symbol	Test Conditions	Rating	Unit
Forward Voltage Drop	V_{FM}	$T_J = +25^{\circ}C, I_{FM} = 800A$	2.0	V
Repetitive Peak Reverse Voltage	V_{RRM}		1600	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	$t \leq 5ms$	1800	V
Reverse Leakage Current (Peak)	I_{RRM}	$T_J = +150^{\circ}C, V_{RRM} = 1400V$	50	mA
Maximum Reverse Recovery Time	t_{rr}	$I_{FM} = 785A, t_p = 100\mu s, di_R/dt = 25A/\mu s, T_C = +25^{\circ}C$	1.0	μs

