ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
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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 ($t \le 5$msec), V_{RSM} 1800V
Maximum Reverse Current (T_J = +150°C), I_{RRM} 50mA
Maximum Forward Surge Current (One Half Cycle), I_{FSM} 4500A
Maximum Permissible Surge Energy (8.3ms), I^2t
For Fusing . . . . . $85000A^2s$
Of Package . . . . . $20 \times 10^6 A^2s$
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°C, I_{FM} = 800A	2.0	V
Repetitive Peak Reverse Voltage	V_{RRM}		1600	V
Non–Repetitive Peak Reverse Voltage	V_{RSM}	t ≤ 5ms	1800	V
Reverse Leakage Current (Peak)	I_{RRM}	T_J = +150C, V_{RRM} = 1400V	50	mA
Maximum Reverse Recovery Time	t_{rr}	I_{FM} = 785A, t_p = 100µs, di_R/dt = 25A/µs, T_C = +25°C	1.0	µs

