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## NTE6128 Silicon Power Rectifier Diode 430 Amp, DO200AA

**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, $V_{RRM}$ .....	1400V
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 <sup>2</sup> s
Of Package .....	20 x 10 <sup>6</sup> A <sup>2</sup> 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-Repertitive Peak Reverse Voltage	$V_{RSM}$	$t \leq 5ms$	1800	V
Reverse Leakage Current (Peak)	$I_{RRM}$	$T_J = +150C$ , $V_{RRM} = 1400V$	50	mA
Maximum Reverse Recovery Time	$t_{rr}$	$I_{FM} = 785A$ , $t_p = 100\mu s$ , $di_F/dt = 25A/\mu s$ , $T_C = +25^{\circ}C$	1.0	$\mu s$

