ELECTRONICS, INC.
44 FARRAND STREET
BLOOMFIELD, NJ 07003
(973) 748–5089

NTE6113, NTE6115, & NTE6121
Industrial Rectifier, 1200 Amp

Absolute Maximum Ratings: (T_J = +175°C unless otherwise specified)

Repetitive Voltage, V_{RRM}
- NTE6113 . . . . . 600V
- NTE6115 . . . . . 1200V
- NTE6121 . . . . . 1600V

Non–Repetitive Voltage, V_{RSM}
- NTE6113 . . . . . 700V
- NTE6115 . . . . . 1300V
- NTE6121 . . . . . 1700V

Average Forward Current (Half Sine Wave), $I_{F(AV)}$
- +55°C Heatsink Temperature (Double Side Cooled) 1625A
- +100°C Heatsink Temperature (Single Side Cooled) 800A

RMS Current (+25°C Heatsink Temperature, Double Side Cooled), $I_{F(RMS)}$ 2950A

DC Forward Current (+25°C Heatsink Temperature, Double Side Cooled), I_F 2760A

Peak One–Cycle Surge (Non–Repetitive) of Forward Current (10ms Duration), I_{FSM}
- 60% V_{RRM} Re–Applied 15400A
- $V_R \le 10V$ 17700A

Maximum Permissible Surge Energy, I^2t
- 10ms Duration, 60% V_{RRM} Re–Applied . . . . . 1180000A^2s
- 10ms Duration, $V_R \le 10V$ . . . . . 1560000A^2s
- 3ms Duration, $V_R \le 10V$ . . . . . 1160000A^2s

Operating Temperature Range, T_{hs} . . . . . –30° to +175°C

Storage Temperature Range, T_{stg} . . . . . –40° to +200°C

Typical Thermal Resistance, Junction–to–Heatsink, $R_{th(j–hs)}$
(For a Device with a Max Forward Volt–Drop)
- Single Side Cooled . . . . . 0.065°C/W
- Double Side Cooled . . . . . 0.033°C/W

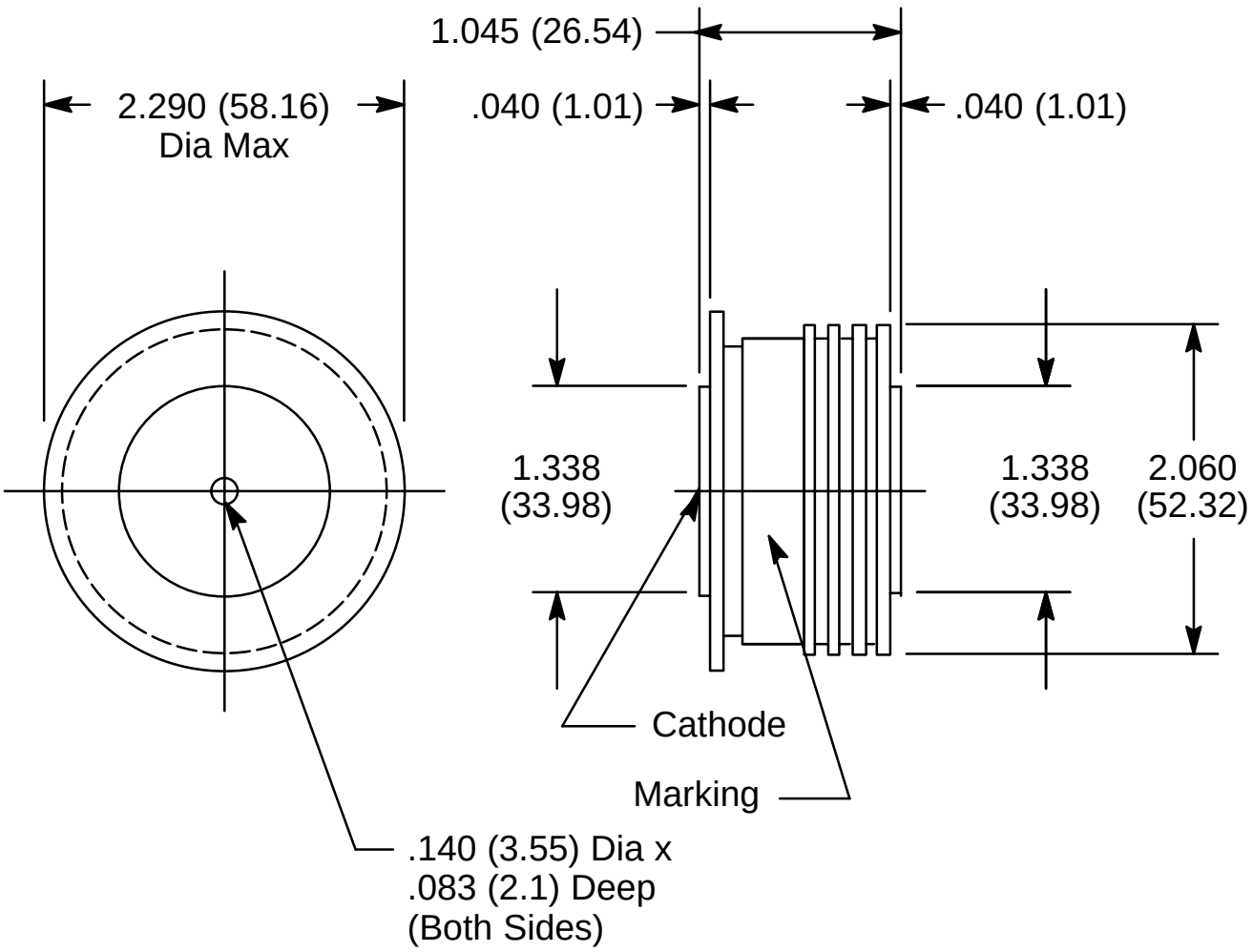
Electrical Characteristics: (Maximum Values @ T_J = +175°C unless otherwise specified)

Peak Forward Voltage Drop (I_{FM} = 3770A), V_{FM} 1.93V

Forward Conduction Threshold Voltage, V_O 0.87V

Forward Conduction Slope Resistance, r 0.28mΩ

Peak Reverse Current (At V_{RRM}), I_{RRM} 30mA


1.045 (26.54)
2.290 (58.16)
Dia Max
.040 (1.01)
.040 (1.01)
1.338
(33.98)
1.338
(33.98)
2.060
(52.32)
Cathode
Marking
.140 (3.55) Dia x
.083 (2.1) Deep
(Both Sides)