ELECTRONICS, INC.
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NTE3075
Bright Red LED Display
2–Digit .560 Inch RHDP

Features:

- Common Cathode
- High Performance GaAsP
- Large, Easy to Read Digits
- Fast Switching – Excellent for Multiplexing
- Low Power Consumption
- Bold Solid Segments that are Highly Legible
- Solid State Reliability – Long Operation Life
- Rugged Plastic Construction
- Directly Compatible with Integrated Circuits
- High Brightness with High Contrast
- Wide Angle Viewing: 150°
- Low Forward Voltage
- Two–Digit Package Simplifies Alignment & Assembly

Applications:

- Digital Readout Displays
- Instrument Panels
- Point–of–Safe Equipment
- Digital Clocks
- TV and Radios

Absolute Maximum Ratings:

Power Dissipation (T_A = +25°C), P_D 45mW
Derate Linearly from 50°C . . . . . –13.7mW/°C
Continuous Forward Current, I_F
Total 480mA
Per segment 15mA
Reverse Voltage (Per Segment and Decimal Point), V_R 5V
Operating Temperature Range, T_{opr} . . . . . –40° to +85°C
Storage Temperature Range, T_{stg} . . . . . –40° to +100°C
Lead Temperature (During Soldering for 5sec, Note 1 and Note 2), T_L . . . . . +260°C ± 5°C
Thermal Resistance, Junction–to–Ambient, R_{thJA} . . . . . 160°C/W
Wavelength Temperature Coefficient (Case Temperature) . . . . . 3.0λ/°C
Forward Voltage Temperature Coefficient . . . . . –2.0mV/°C

Note 1. Leads of the device immersed to 1/16 inch from the body. Maximum device surface temperature is +140°C.
Note 2. For flux removal, Freon TF, Freon TE, Isoproponal or water may be used up to their boiling points.

Rev. 11–16

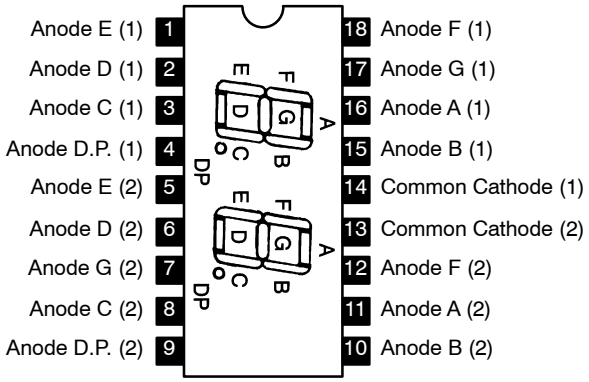
RoHS 2002/95/EC

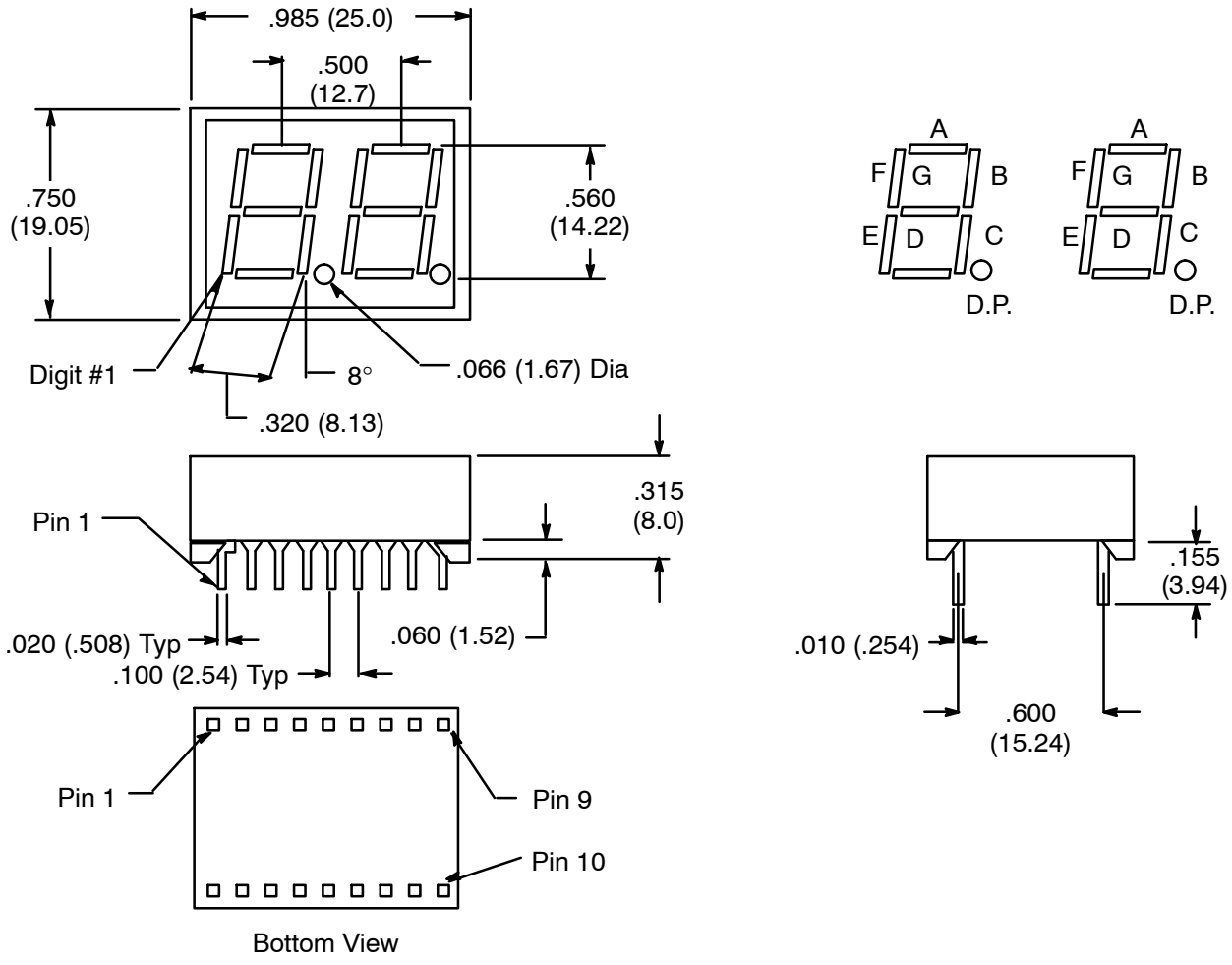
Electrical−Optical Characteristics: (Per Diode, T_A = +25°C unless otherwise specified)

Parameter	Test Conditions	Min	Typ	Max	Unit
Luminous Intensity, Digit Average	I_F = 10mA, Note 3	125	420	–	μcd
Peak Forward Current	Duty 1/10 @ 1khz	–	–	50	mA
Peak Emission Wavelength		–	697	–	nm
Spectral Line Half Width		–	20	–	nm
Forward Voltage					
Segment	I_F = 20mA	–	–	2	V
Decimal Point	I_F = 20mA	–	–	2	V
Dynamic Resistance					
Segment	I_F = 20mA	–	2	–	Ω
Decimal Point	I_F = 20mA	–	2	–	Ω
Capacitance					
Segment	V = 0	–	35	–	pF
Decimal Point	V = 0	–	35	–	pF
Reverse Current					
Segment	V_R = 5V	–	–	100	μA
Decimal Point	V_R = 5V	–	–	100	μA

Note 5. The digit average Luminous Intensity is obtained by summing the Luminous Intensity of each segment and dividing the total number of segment as measured with a Photo Research Corp. “SPECTRA” Microcandela Meter (Model IV−D). Intensity will not vary more than ±33.3% between all segments within a digit.

Pin Connection Diagram




.985 (25.0)
.500
(12.7)
.750
(19.05)
.560
(14.22)
Digit #1
8°
.066 (1.67) Dia
.320 (8.13)
A
F
G
B
E
D
C
D.P.
A
F
G
B
E
D
C
D.P.
Pin 1
.315
(8.0)
.020 (.508) Typ
.100 (2.54) Typ
.060 (1.52)
.155
(3.94)
.010 (.254)
.600
(15.24)
Pin 1
Pin 9
Pin 10
Bottom View