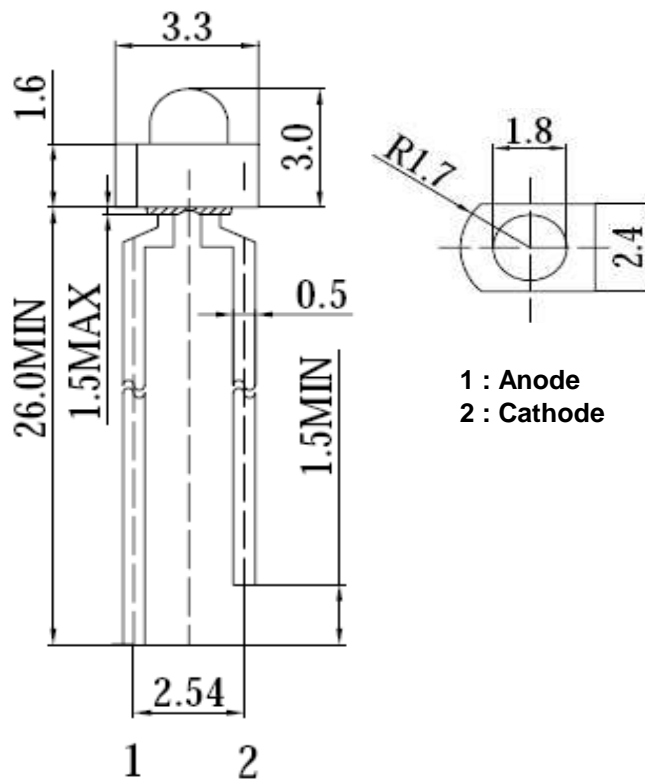




Applications

- Electronic Signs and Signals
- Small Area Illuminations
 - Back Lighting
 - Other Lighting

Technical Drawing



Notes :

All dimensions in mm tolerance is $\pm 0.1\text{mm}$ unless otherwise noted.

| | |
|--------------------------|-----------------|
| Tower LED Red | |
| Part No.: | M13A1005 |
| Customer: | |

| | | | | | | | |
|-------|------|------|-------|--------|------|-------|------------|
| DRW: | Dong | CHKD | Chang | MATL: | Chui | DATE | 06.12.2009 |
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Absolute Maximum Ratings

Ta=25°C

| <i>Item</i> | <i>Symbol</i> | <i>---</i> | <i>Unit</i> |
|------------------------|-------------------|------------|-------------|
| Power Dissipation | P _D | 130 | mW |
| DC Forward Current | I _F | 50 | mA |
| Pulsed Forward Current | I _{FP} * | 120 | mA |
| Reverse Voltage | V _R | 5 | V |
| Operating Temperature | T _{OP} | -30 to 85 | °C |
| Storage Temperature | T _{ST} | -40 to 100 | °C |

* 0.1 msec pulse, 10% duty cycle

Electrical / Optical Characteristics

I_F=20mA Ta=25°C

| Emitting Color | Red | | |
|-----------------------------|-------------------|------|----------------|
| Material | --- | | |
| Forward Voltage | typ. | 2.1 | V _F |
| | max. | 2.6 | V _F |
| Wavelength typ. | λ _D | 620 | nm |
| | λ _P | 625 | nm |
| | Δλ | --- | nm |
| Color Temperature | min. | --- | K |
| | max. | --- | K |
| Luminous Intensity * | min. | 3000 | mcd |
| | typ. | 4000 | mcd |
| Reverse Current | max. | 10 | μA |
| Viewing Angle | 2θ _{1/2} | 30 | |

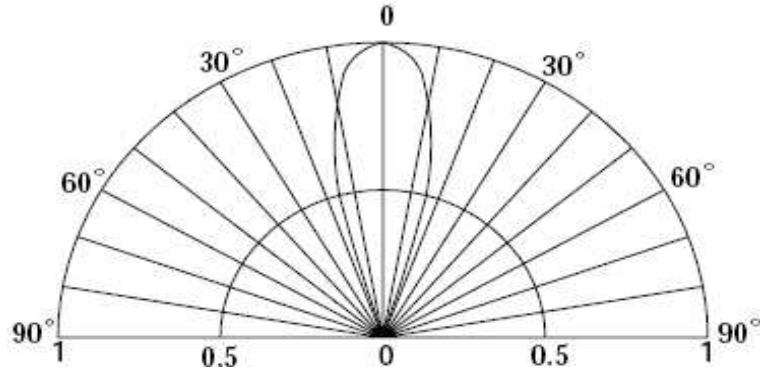
* Per NIST standards

| | |
|--------------------------|-----------------|
| Tower LED Red | |
| Part No.: | M13A1005 |
| Customer: | |

| | | | | | | | |
|-------|------|------|-------|--------|------|-------|------------|
| DRW: | Dong | CHKD | Chang | MATL: | Chui | DATE | 06.12.2009 |
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Directive Characteristics



| | |
|--------------------------|-----------------|
| Tower LED Red | |
| Part No.: | M13A1005 |
| Customer: | |

| | | | | | | | |
|-------|------|------|-------|--------|------|-------|------------|
| DRW: | Dong | CHKD | Chang | MATL: | Chui | DATE | 06.12.2009 |
| APPD: | Ping | | | FINISH | Hui | Sheet | 3 from 6 |



Typical Characteristics



| | |
|--------------------------|-----------------|
| Tower LED Red | |
| Part No.: | M13A1005 |
| Customer: | |

| | | | | | | | |
|-------|------|------|-------|--------|------|-------|------------|
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Solder Condition

Lead Free Solder



| | |
|--------------------------|-----------------|
| Tower LED Red | |
| Part No.: | M13A1005 |
| Customer: | |

| | | | | | | | |
|-------|------|------|-------|--------|------|-------|------------|
| DRW: | Dong | CHKD | Chang | MATL: | Chui | DATE | 06.12.2009 |
| APPD: | Ping | | | FINISH | Hui | Sheet | 5 from 6 |



Color table curve



| | |
|--------------------------|-----------------|
| Tower LED Red | |
| Part No.: | M13A1005 |
| Customer: | |

| | | | | | | | |
|-------|------|------|-------|--------|------|-------|------------|
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