

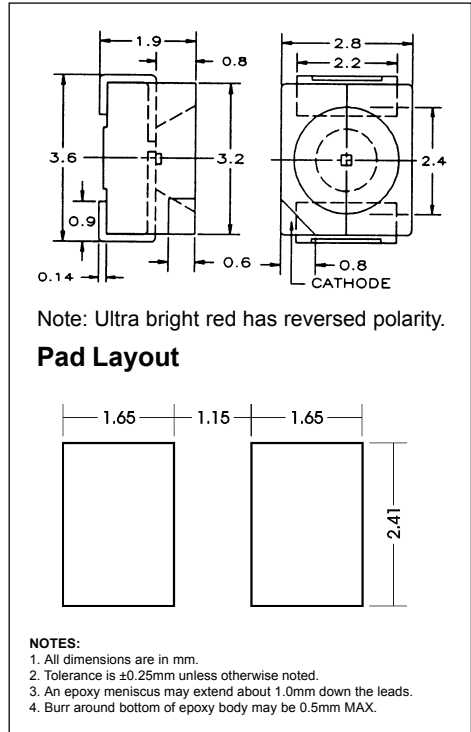
# Surface Mount LED Lamps

## FEATURES

- Excellent on/off contrasts
- Wide viewing angle
- Solid state reliability
- Choice of water clear or color clear lens
- Other colors/materials available

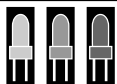
## MAXIMUM RATINGS (Ta = 25°C)

| PART NO.     | FORWARD CURRENT (I <sub>f</sub> ) (mA) | REVERSE VOLTAGE (V <sub>R</sub> )(V) | POWER DISSIPATION (P <sub>D</sub> )(mW) | OPERATING TEMP (T <sub>opr</sub> ) (°C) | STORAGE TEMP (T <sub>stg</sub> ) (°C) |
|--------------|--|--------------------------------------|---|---|---------------------------------------|
| MTSM135K-RG  | 30                                     | 5.0                                  | 85                                      | -25~+85                                 | -25~+100                              |
| MTSM235K-G   | 30                                     | 5.0                                  | 85                                      | -25~+85                                 | -25~+100                              |
| MTSM335K-Y   | 30                                     | 5.0                                  | 85                                      | -25~+85                                 | -25~+100                              |
| MTSM435K-HR  | 30                                     | 5.0                                  | 85                                      | -25~+85                                 | -25~+100                              |
| MTSM735K-UR  | 30                                     | 4.0                                  | 70                                      | -25~+85                                 | -25~+100                              |
| MTSM735KA-UR | 30                                     | 4.0                                  | 70                                      | -25~+85                                 | -25~+100                              |
| MTSM145K-RG  | 30                                     | 5.0                                  | 85                                      | -25~+85                                 | -25~+100                              |
| MTSM245K-G   | 30                                     | 5.0                                  | 85                                      | -25~+85                                 | -25~+100                              |
| MTSM345K-Y   | 30                                     | 5.0                                  | 85                                      | -25~+85                                 | -25~+100                              |
| MTSM445K-O   | 30                                     | 5.0                                  | 85                                      | -25~+85                                 | -25~+100                              |
| MTSM445K-HR  | 30                                     | 5.0                                  | 85                                      | -25~+85                                 | -25~+100                              |
| MTSM745K-UR  | 30                                     | 4.0                                  | 70                                      | -25~+85                                 | -25~+100                              |
| MTSM745KA-UR | 30                                     | 4.0                                  | 70                                      | -25~+85                                 | -25~+100                              |



## OPTO-ELECTRICAL CHARACTERISTICS (Ta = 25°C)

| PART NO.     | MATERIAL    | LENS COLOR   | VIEWING ANGLE typ. | LUMINOUS INTENSITY (mcd) |      |     | FORWARD VOLTAGE (V) |      |     | REVERSE CURRENT |    | PEAK WAVE LENGTH nm |
|--------------|-------------|--------------|--------------------|--------------------------|------|-----|---------------------|------|-----|-----------------|----|---------------------|
|              |             |              |                    | min.                     | typ. | @mA | typ.                | max. | @mA | µA              | Vr |                     |
| MTSM135K-RG  | GaP/GaP     | Water Clear  | 120°               | 2.2                      | 3.7  | 20  | 2.1                 | 3.0  | 20  | 100             | 5  | 700                 |
| MTSM235K-G   | GaP/GaP     | Water Clear  | 120°               | 7.4                      | 18.8 | 20  | 2.1                 | 3.0  | 20  | 100             | 5  | 567                 |
| MTSM335K-Y   | GaAsP/GaP   | Water Clear  | 120°               | 6.2                      | 15.6 | 20  | 2.1                 | 3.0  | 20  | 100             | 5  | 585                 |
| MTSM435K-HR  | GaAsP/GaP   | Water Clear  | 120°               | 8.2                      | 20.6 | 20  | 2.1                 | 3.0  | 20  | 100             | 5  | 635                 |
| MTSM735K-UR  | GaAlAs/GaAs | Water Clear  | 120°               | 112                      | 140  | 20  | 1.9                 | 2.5  | 20  | 100             | 4  | 660                 |
| MTSM735KA-UR | GaAlAs      | Water Clear  | 120°               | 228                      | 285  | 20  | 1.9                 | 2.5  | 20  | 100             | 4  | 660                 |
| MTSM145K-RG  | GaP/GaP     | Red Clear    | 120°               | 2.2                      | 3.7  | 20  | 2.1                 | 3.0  | 20  | 100             | 5  | 700                 |
| MTSM245K-G   | GaP/GaP     | Green Clear  | 120°               | 7.4                      | 18.8 | 20  | 2.1                 | 3.0  | 20  | 100             | 5  | 567                 |
| MTSM345K-Y   | GaAsP/GaAs  | Yellow Clear | 120°               | 6.2                      | 15.6 | 20  | 2.1                 | 3.0  | 20  | 100             | 5  | 585                 |
| MTSM445K-O   | GaAsP/GaAs  | Orange Clear | 120°               | 8.2                      | 20.6 | 20  | 2.1                 | 3.0  | 20  | 100             | 5  | 635                 |
| MTSM445K-HR  | GaAsP/GaAs  | Red Clear    | 120°               | 8.2                      | 20.6 | 20  | 2.1                 | 3.0  | 20  | 100             | 5  | 635                 |
| MTSM745K-UR  | GaAlAs/GaAs | Red Clear    | 120°               | 112                      | 140  | 20  | 1.9                 | 2.5  | 20  | 100             | 4  | 660                 |
| MTSM745KA-UR | GaAlAs      | Red Clear    | 120°               | 228                      | 285  | 20  | 1.9                 | 2.5  | 20  | 100             | 4  | 660                 |



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