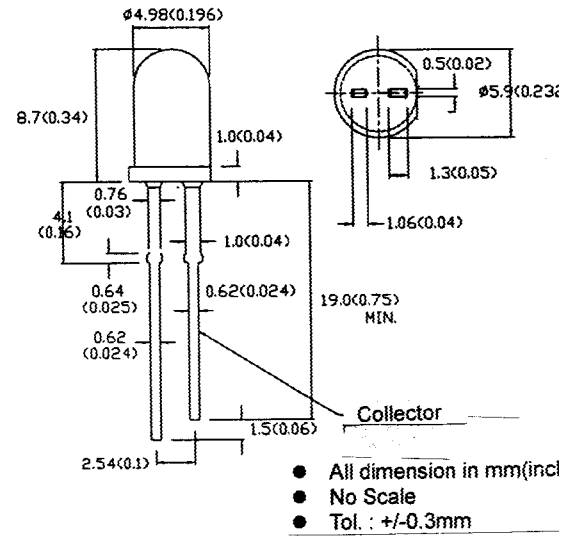


DESCRIPTION

The MEL79D is NPN silicon planar photo-transistor with 5mm $\phi$  light rejective filter epoxy package. It features ultra high illumination sensitivity and fast response time.



ABSOLUTE MAXIMUM RATINGS

Collector-Emitter Voltage  
Emitter-Collector Voltage  
Continuous Power Dissipation (Ta=25°C)  
Operating Junction Temperature  
Storage Temperature Range

VCEO 30V  
VECO 5V  
Pd 50mW  
Tj -40 to +85°C  
Tstg -40 to +100°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

| PARAMETER                            | SYMBOL   | MIN | MAX | UNIT    | TEST CONDITIONS                        |
|--------------------------------------|----------|-----|-----|---------|--|
| Collector-Emitter Breakdown Voltage  | BVCEO    | 30  |     | V       | IC=100 $\mu$ A Ee=0                    |
| Emitter-Collector Breakdown Voltage  | BVECO    | 5   |     | V       | IC=100 $\mu$ A Ee=0                    |
| Dark Current                         | ID       |     | 200 | nA      | VCE=10V Ee=0                           |
| Light Current                        | IL       | 4   |     | nA      | VCE=5V Ee=5mW/cm <sup>2</sup> *        |
| Collector-Emitter Saturation Voltage | VCE(sat) |     | 0.3 | V       | IC=500 $\mu$ A Ee=20mW/cm <sup>2</sup> |
| Rise Time                            | Tr       | 3   | TYP | $\mu$ S | Vcc=5V IC=4mA RL=100                   |
| Fall Time                            | Tf       | 3   | TYP | $\mu$ S | Vcc=5V IC=4mA RL=100                   |

\* Measured at noted irradiance as emitted from tungsten filament lamp at a color temperature of 2854°K.



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