



ABSOLUTE MAXIMUM RATINGS AT TA=25°C

| PARAMETER | MAXIMUM RATING | UNIT |
|--|---------------------|------|
| Power Dissipation | 100 | mW |
| Collector-Emitter Voltage | 30 | V |
| Emitter-Collector Voltage | 5 | V |
| Operating Temperature Range | -40°C to + 85°C | |
| Storage Temperature Range | -55°C to + 100°C | |
| Lead Soldering Temperature [1.6mm(.063") From Body] | 260°C for 5 Seconds | |

ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C

| PARAMETER | SYMBOL | MIN. | TYP. | MAX | UNIT | TEST CONDITION | BIN No. | Color Marking |
|--|---------------|------|------|------|---------|---|---------|---------------|
| Collector-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | 30 | | | V | $I_c = 1mA$ $E_e = 0mW/cm^2$ | | |
| Emitter-Collector Breakdown Voltage | $V_{(BR)ECO}$ | 5 | | | V | $I_E = 100 \mu A$ $E_e = 0mW/cm^2$ | | |
| Collector Emitter Saturation Voltage | $V_{CE(SAT)}$ | | 0.1 | 0.4 | V | $I_c = 50 \mu A$ $E_e = 0.5mW/cm^2$ | | |
| Rise Time | T_r | | 15 | | μs | $V_{CC} = 5V$ $I_c = 1mA$ $R_L = 1K \Omega$ | | |
| Fall Time | T_f | | 18 | | μs | | | |
| Collector Dark Current | I_{CEO} | | 0.1 | 100 | nA | $V_{CE} = 10V$ $E_e = 0mW/cm^2$ | | |
| On Stage Collector Current Ratio (I_{L1}/I_{L2}) | R | 0.8 | 1.0 | 1.25 | | | | |
| Average On State Collector Current Range Setting of LITE-ON Production (I_{L1}/I_{L2}) / 2 | $I_{C(ON)}$ | 200 | | 300 | μA | $V_{CE} = 5V$ $E_e = 1mW/cm^2$ | BIN A | Red |
| | | 300 | | 400 | | | BIN B | Black |
| | | 400 | | 500 | | | BIN C | Green |
| | | 500 | | 600 | | | BIN D | Blue |
| | | 600 | | 700 | | | BIN E | White |
| | | 700 | | 800 | | | BIN F | Purple |
| Average On State Collector Current Range Q.C Limits (I_{L1}/I_{L2}) / 2 | $I_{C(ON)}$ | 160 | | 360 | μA | $V_{CE} = 5V$ $E_e = 1mW/cm^2$ | BIN A | Red |
| | | 240 | | 480 | | | BIN B | Black |
| | | 320 | | 600 | | | BIN C | Green |
| | | 400 | | 720 | | | BIN D | Blue |
| | | 480 | | 840 | | | BIN E | White |
| | | 560 | | 960 | | | BIN F | Purple |

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25°C Ambient Temperature Unless Otherwise Noted)

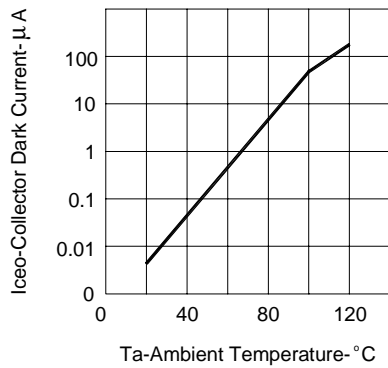


FIG.1 COLLECTOR DARK CURRENT VS AMBIENT TEMPERATURE

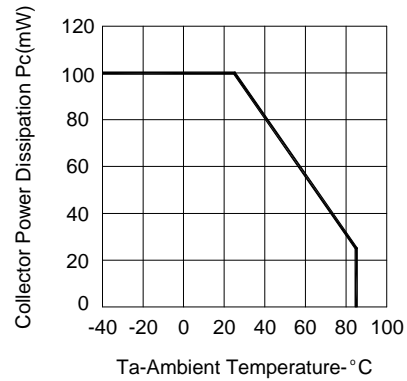


FIG.2 COLLECTOR POWER DISSIPATION VS AMBIENT TEMPERATURE

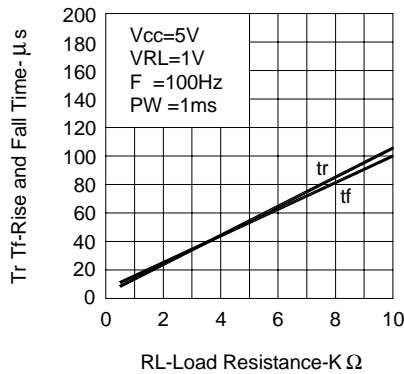


FIG.3 RISE AND FALL TIME VS LOAD RESISTANCE

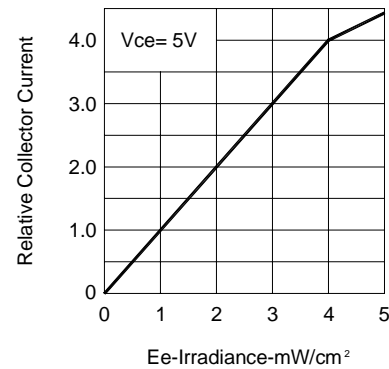


FIG.4 RELATIVE COLLECTOR CURRENT VS IRRADIANCE