



TECHNICAL DATA SHEET

CD-1CL5

NPN SILICON PHOTOTRANSISTOR

THE CD-1CL5 IS A HIGH SENSITIVITY NPN SILICON PHOTOTRANSISTOR MOUNTED IN A CERAMIC HEADER WITH CLEAR EPOXY LENS, WHICH OFFERS A WIDE ANGULAR RESPONSE.

FEATURES

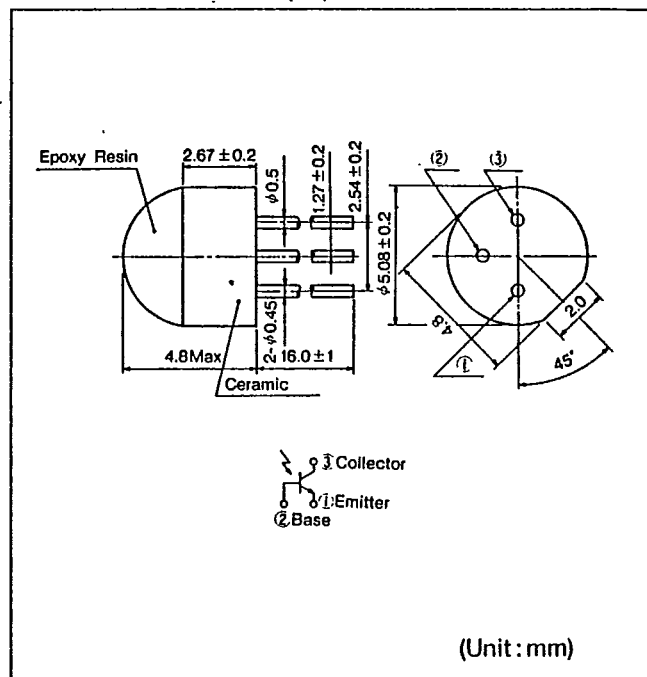
- WIDE ANGULAR RESPONSE
- RELATIVELY LOW COST
- LOW PROFILE PACKAGE

APPLICATIONS

- OPTICAL SWITCHES
- INFRARED SENSORS
- CAMERA STROBOSCOPES

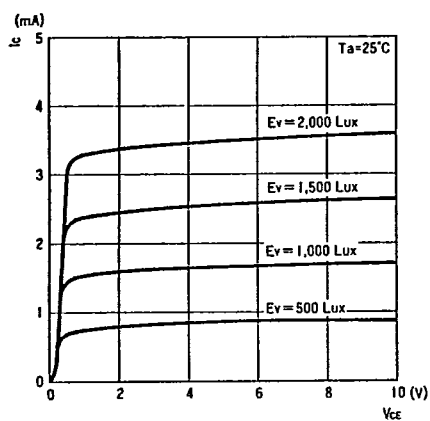
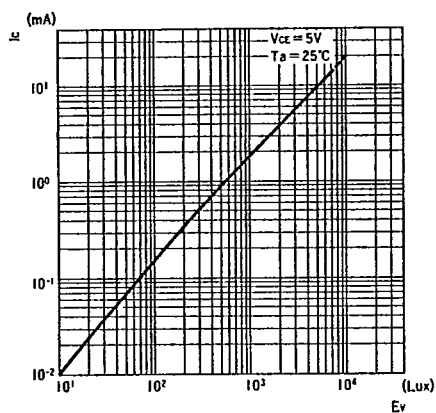
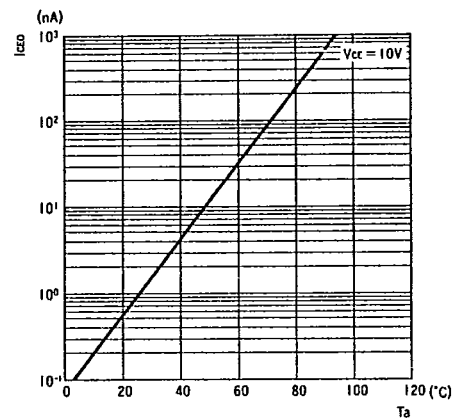
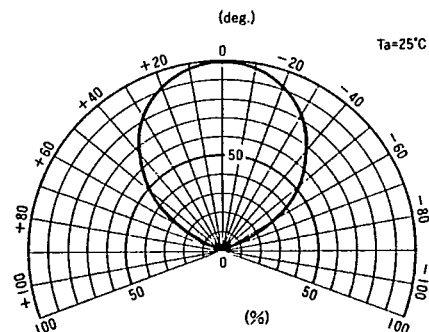
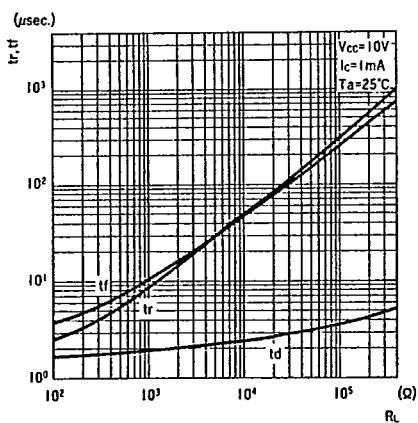
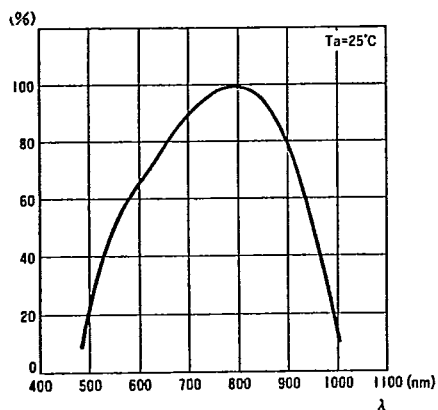
ABSOLUTE MAXIMUM RATINGS

C-E VOLTAGE (V_{CE0})	30 VOLTS
E-C VOLTAGE (V_{EC0})	5 VOLTS
COLLECTOR CURRENT (I_C)	20 mA
COLLECTOR POWER DISSIPATION	75 mW
OPERATING TEMPERATURE	-20~+90 °C
STORAGE TEMPERATURE	-30~+100 °C
SOLDERING TEMPERATURE *1	260 °C
*1 T=5SEC.	



ELECTRO-OPTICAL SPECIFICATIONS		CONDITIONS	MIN.	TYP.	MAX.	UNIT
COLLECTOR DARK CURRENT (I_{CE0})		$V_{CE0}=10V$		1	200	nA
LIGHT CURRENT (I_L)		$V_{CE}=5V, 1,000LUX^*2$	0.5	1.7		mA
C-E SATURATION VOLTAGE ($V_{CE(SAT)}$)		$I_C=0.2mA, 2,000LUX^*2$		0.15	0.4	V
SWITCHING SPEEDS	RISE TIME	$V_{CC}=10V$ $I_C=1mA$ $R_L=100\Omega$		2.5		μSEC.
	FALL TIME			3.8		μSEC.
SPECTRAL SENSITIVITY				480~1,000		nm
PEAK WAVELENGTH				800		nm
HALF ANGLE				±50		DEG.

*2=2856K

I_C/V_{CE}  I_C/E_v  I_{CE0}/T_a  $t_r, t_f/R_L$  P_C/T_a 