

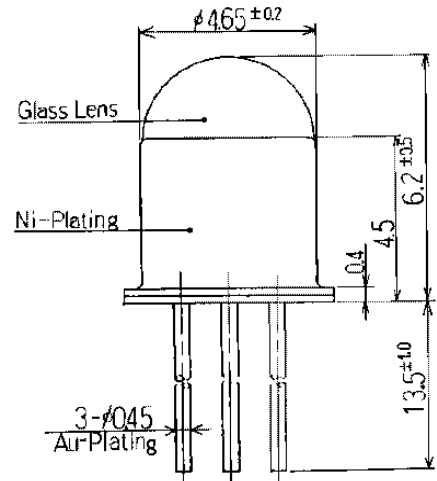
MTD8000N

Features

High Reliability in Demanding Environments

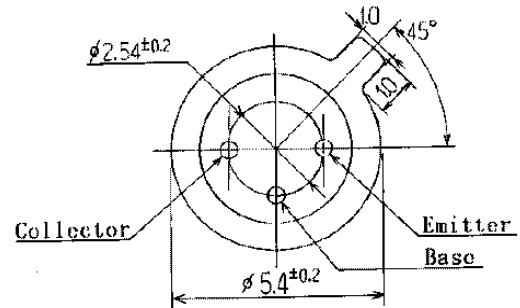
Applications

Optical Sensors
Optical Switches
Edge Sensing
Smoke Detectors



Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Max.	Test Condition	Unit
Collector Power Dissipation	Pc	250	-	mW
Collector-Emitter Voltage	Vce	30	-	V
Emitter-Collector Voltage	Vec	5	-	V
Collector Current	Ic	50	-	mA
Operating Temperature	Topr	-30~+100	-	°C
Storage Temperature	Tstg	-40~+125	-	°C
Junction Temperature	Tj	125	-	°C
Soldering Temperature	Tsol	260	for 5 sec. max	°C



Opto-Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
C-E Saturation Voltage	VCE(sat)	Ic=0.2mA Ee=5mW/cm ²	-	.20	-	μA
Light Current	IL	Vce=20V, Ee=0.5mW/cm ²	-	3.00	-	μA
Dark Current	Ib	Vce=20V, Ee = 0mW/cm ²	-	-	100	nA
Spectral Sensitivity	λ	-	-	400~1100	-	μA
Peak Sensitivity Wavelength	λp	-	-	880	-	V
Beam Angle	θ	-	-	± 12°	-	deg.
Rise Time	Tr	RL=100Ω, Vce=5V, Ic=0.5mA	-	10000.00	-	ns
Fall Time	Tf	RL=100Ω, Vce=5V, Ic=0.5mA	-	10000.00	-	ns

* Color Temperature = 2870°K Standard Tungsten Lamp

MTD8000N Graphs

