

### FEATURES

- High output power ( $\phi_{ep} \geq 30W$ )
- High speed rise time ( $t_r = 0.5 \text{ ns typ.}$ )

### APPLICATIONS

- Laser radar
- Range finder
- Excitation light source
- Optical trigger
- Security barrier

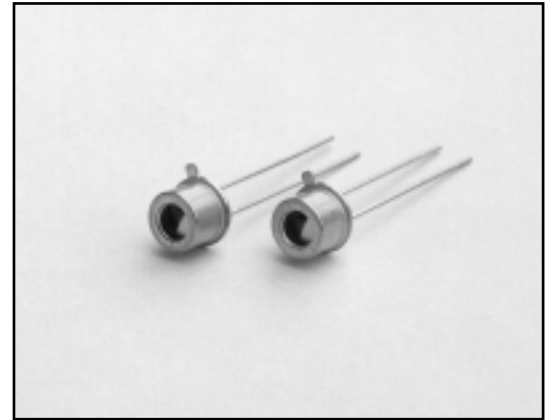
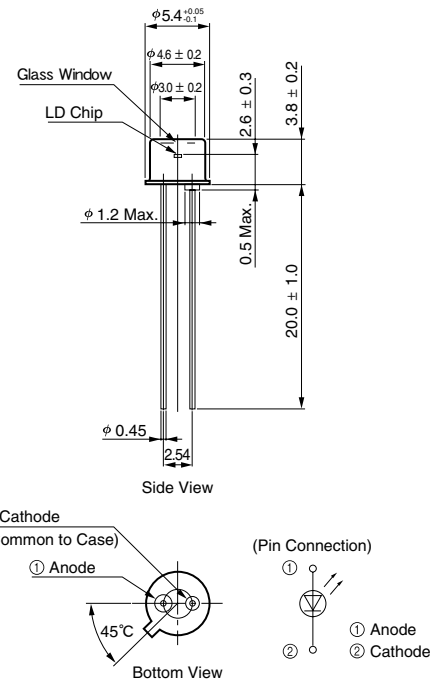


Figure 1: Dimensional Outline (Unit: mm)



### ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Value	Unit
Pulsed Forward Current	I <sub>FP</sub>	35	A
Reverse Voltage	V <sub>R</sub>	2	V
Pulsed Radiant Output Power	$\phi_{ep}$	40	W
Pulse Duration (FWHM)	t <sub>w</sub>	100	ns
Duty Ratio	DR	0.075	%
Operating Temperature	T <sub>op</sub>	-30 to +85	°C
Storage Temperature	T <sub>stg</sub>	-40 to +125	°C

### ELECTRICAL AND OPTICAL CHARACTERISTICS (T<sub>a</sub>=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Pulsed Radiant Power	$\phi_{ep}$	I <sub>FP</sub> =30A	30	-	-	W
Peak Emission Wavelength	$\lambda_p$		-	870	-	nm
Spectral Radiation Half Bandwidth	$\Delta \lambda$		-	4	-	nm
Forward Voltage	V <sub>F</sub>	I <sub>FP</sub> =30A	-	7	-	V
Rise Time	t <sub>r</sub>		-	0.5	-	ns
Beam Spread Angle : Parallel	$\theta_{//}$	FWHM	-	9	-	degree
: Vertical	$\theta_{\perp}$	I <sub>FP</sub> =30A	-	30	-	degree
Lasing Threshold Current	I <sub>th</sub>		-	1	-	A

Note: General operating condition  $\phi_{ep} \leq 30 \text{ W}$ ,  $t_w \leq 50 \text{ ns}$ , Repetition frequency  $\leq 8 \text{ kHz}$

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