

Infrared Emitting Diodes(GaAs)

KODENSHI

KET - 511

The KET - 511 is a GaAs IRED mounted in a low profile clear epoxy package. This IRED is both compact and easy to mount.

FEATURES

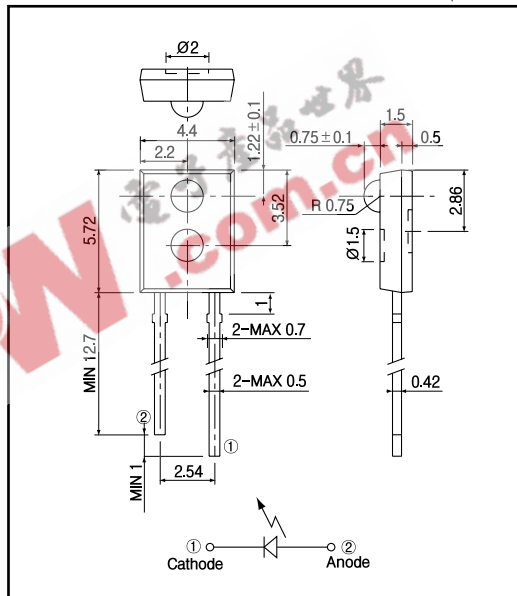
- Plastic mold package

APPLICATIONS

- Photointerrupters
- Mouses
- Encoders

DIMENSIONS

(Unit : mm)



MAXIMUM RATINGS

(Ta=25)

Item	Symbol	Rating	Unit
Reverse voltage	V_R	5	V
Forward current	I_F	50	mA
Power dissipation	P_D	75	mW
Pulse forward current ^{*1}	I_{FP}	1	A
Operating temp.	$T_{opr.}$	- 30 + 85	
Storage temp.	$T_{stg.}$	- 25 + 85	
Soldering temp. ^{*2}	$T_{sol.}$	260	

*1. pulse width : t_w 100 μ sec, period : $T=10$ msec.

*2. For MAX.5 seconds at the position of 2 mm from the package

ELECTRO-OPTICAL CHARACTERISTICS

(Ta=25)

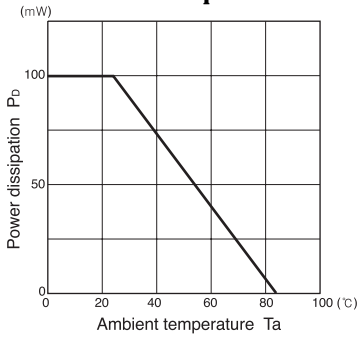
Item	Symbol	Conditions	Min.	Typ.	Max.	Unit.
Forward voltage	V_F	$I_F=20$ mA		1.2	15	V
Reverse current	I_R	$V_R=5$ V			10	μ A
Peak emission wavelength	λ_p	$I_F=20$ mA		940		nm
Spectral bandwidth		$I_F=20$ mA		50		nm
Radiant intensity ^{*3}	P_D	$I_F=4$ mA				mW/sr
Half angle				± 40		deg.

*3. Measured by tester of KODENSHI CORP.

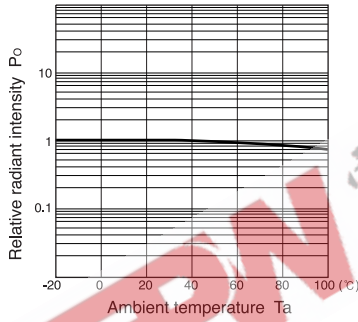
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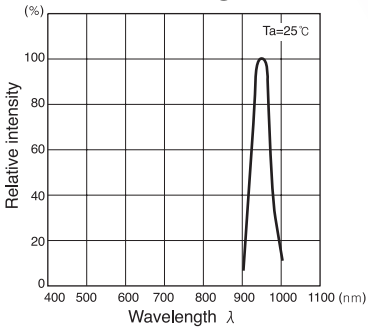
Power dissipation Vs. Ambient temperature



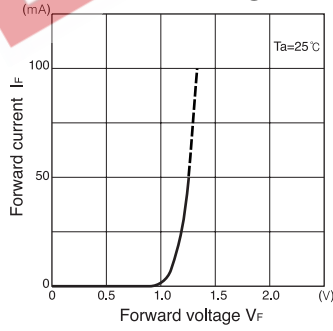
Relative radiant intensity vs. Ambient temperature



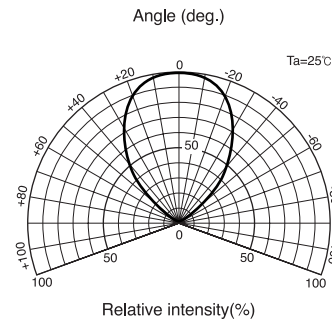
Relative intensity Vs. Wavelength



Forward current vs. Forward voltage



Radiant Pattern



Relative radiant intensity Vs. Distance

