

Plastic Mold Infrared LEDs

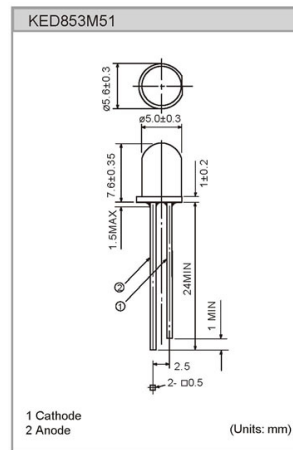
KED853M51

Features

- Transparent epoxy mold
- High power:22mW
- High speed response:25ns rise time
- Direct modulation

Applications

- Available for wireless digital transmission
- Optical switches
- Optical encoders
- Optical instruments
- Automatic control apparatus



Specifications

Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Forward current	I_F	100	mA	
Peak forward current	I_{FP}	1	A	Puls width=100μs, Duty ratio=1%
Reverse voltage	V_R	5	V	
Collector dissipation	P_D	150	mW	
Operating temperature	T_{opr}	-30 to +85		Avoid dew condensation
Storage temperature	T_{stg}	-30 to +100		Avoid dew condensation
Soldering temperature	T_{sol}	260		Soldering time less than 5 seconds

Electrical and Optical characteristics

Parameter	Symbol	Value			Unit	Conditions
		Min.	Typ.	Max		
Forward voltage	V_F		1.5	1.8	V	$I_F=50mA$
Reverse Current	I_R			10	μA	$V_R=5V$
Optical output power	P_O		22		mW	$I_F=50mA$
Peak wavelength	λ		850		nm	$I_F=50mA$
Spectral width			40		nm	$I_F=50mA$
Half angle	2θ		50		deg	$I_F=50mA$
Rise time	t_r		25		ns	$I_F=50mA$
Fall time	t_f		15		ns	$I_F=50mA$

