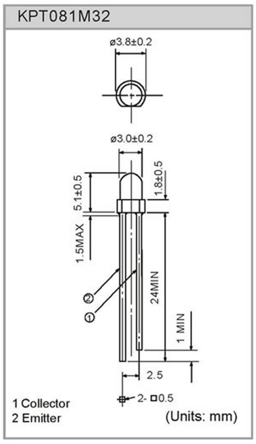
Silicon Phototransistors

KPT081M32

Features

- NPN phototransistor
- Transparent epoxy potting
- Low leak current



Applications

- Optical switches
- Optical encoders
- Photo-isolator
- Camera stroboscopes
- Infrared sensors
- Automatic control apparatus

Specifications

Absolute Maximum Ratings

Parameter	Symbol	Value	Unit	Conditions
Collector-emitter voltage	V_{CEO}	20	V	
Emitter-collector voltage	V_{ECO}	5	V	
Collector dissipation	P_D	75	mW	
Operating temperature	T_{opr}	-20 to +85	℃	Avoid dew condensation
Storage temperature	T_{stg}	-30 to +100	℃	Avoid dew condensation

Electrical and Optical characteristics

Parameter	Symbol	Value			Unit	Conditions
		Min.	Typ.	Max		
Sensitive size	S		0.64×0.64		mm	
Sensitive wavelength	λ	400	800(λp)	1000	nm	λp=Peak wavelength
Photocurrent	I_L		4		mA	V_{CE}=5V, 1000lx(@2856K)
Dark current	I_D		5	200	nA	V_{CE}=20V
Current amplification factor	h_{FE}	600			-	V_{CE}=5V, I_C=2mA
Collector-Emitter Saturation Voltage	V_{CE}(sat)			0.4	V	I_C=1mA, 1000lx(@2856K)
Rise/Fall Time	tr,tf		5		μS	V_{CE}=5V, I_C=2mA, R_L=100Ω
Half angle	2θ		90		deg	