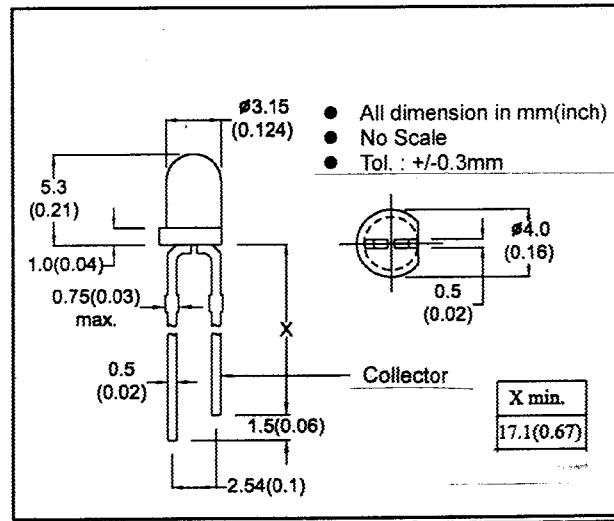


MICRO ELECTRONICS

NPN SILICON
PHOTO
TRANSISTOR

DESCRIPTION

MEL78D is NPN silicon planar photo-transistor with 3mm diameter light rejective filter epoxy package. It features ultra high illumination sensitivity and fast response time.



ABSOLUTE MAXIMUM RATINGS

Collector-Emitter Voltage	V _{CEO}	30V
Emitter-Collector Voltage	V _{ECO}	5V
Continuous Power Dissipation	P _d	50mW
Operating Junction Temperature	T _j	-40 to +85°C
Storage Temperature Range	T _{stg}	-40 to +100°C
Lead Soldering Temperature (5 second, 1/16 inch from body)		260°C

ELECTRO-OPTICAL CHARACTERISTICS (T_a=25°C)

PARAMETER	SYMBOL	MIN	MAX	UNIT	CONDITIONS
Collector-Emitter Breakdown Voltage	BV _{CEO}	30		V	I _C =100μA E _e =0
Emitter-Collector Breakdown Voltage	BV _{ECO}	5		V	I _C =100μA E _e =0
Dark Current	I _D		100	nA	V _{CE} =10V E _e =0
Light Current	I _L *	1.3		mA	V _{CE} =5V E _e =5mW/cm ²
Collector-Emitter Saturation Voltage	V _{CE(sat)}		0.3	V	I _C =2mA I _B =100μA
Rise Time	T _r	15	TYP	μs	V _{CE} =5V I _C =1mA R _L =1Kohm
Fall Time	T _f	15	TYP	μs	V _{CE} =5V I _C =1mA R _L =1Kohm

* : Measured at noted irradiance as emitted from a tungsten filament lamp at a color temperature of 2354°K.

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