

MTRS5250T

Features

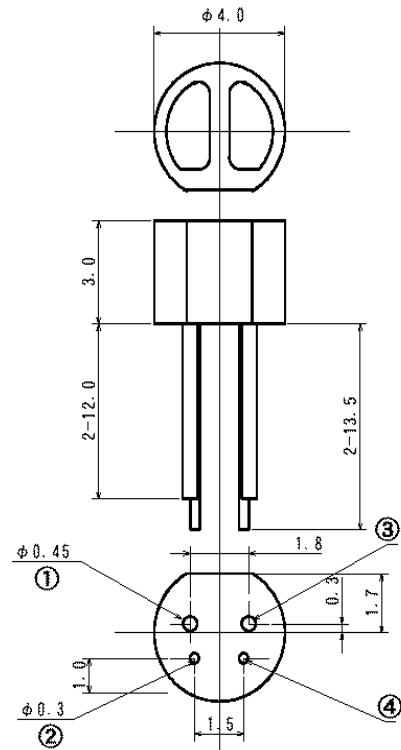
High Reliability
Compact Package

Applications

Card Reader
Bar Code Reader
Edge Sensing
Money/Bill Reader

Maximum Ratings (Ta=25°C)

Characteristic	Symbol	Max.	Test Condition	Unit
Forward Current	I _F	20	-	mA
Pulsed Forward Current	I _{FP}	50.00	tw=10μs, T=10mS	A
Reverse Voltage	V _R	5	-	V
Power Dissipation	P _D	70.00	-	mW
Collector-Emitter Voltage	V _{CE}	50	-	V
Emitter-Collector Voltage	V _{EC}	5	-	V
Collector Current	I _C	50	-	mA
Operating Temperature	T _{opr}	-20 ~ +80	-	°C
Storage Temperature	T _{stg}	-30 ~+100	-	°C
Soldering Temperature	T _{sol}	260	for 5 sec. max	°C



- ① LED Cathode ③ PTR Collector
② LED Anode ④ PTR Emitter

Opto-Electrical Characteristics (Ta=25°C)

Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F =20mA	-	3.50	4.00	V
Reverse Current	I _R	V _R =5V	-	-	10	μA
Light Current	I _L	I _F =10mA, V _{ce} =10V, d=1mm*	-	200.00	-	μA
Dark Current	I _D	V _{ce} =10V	-	-	100	nA
Peak Sensitivity Wavelength	nm	I _F =20mA	-	520	-	nm
Spectral Line Half Width	Δλ	I _F =20mA	-	38	-	nm
Cross-Talk	I _X	I _F =10mA, V _{ce} =10V	-	-	200	nA
Rise Time	T _r	V _{ce} =5V, I _o =0.1mA, R _L =1KΩ	-	2000	-	ns
Fall Time	T _f	V _{ce} =5V, I _o =0.1mA, R _L =1KΩ	-	3000	-	ns

Company Headquarters

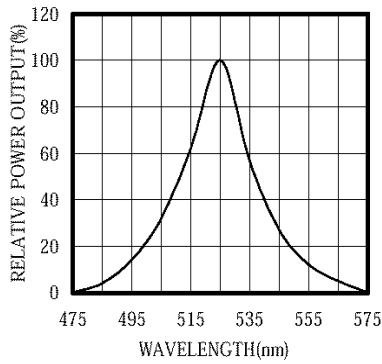
3 Northway Lane North
Latham, New York 12110
Toll Free: 800.984.5337
Fax: 518.785.4725

West Coast Sales Office

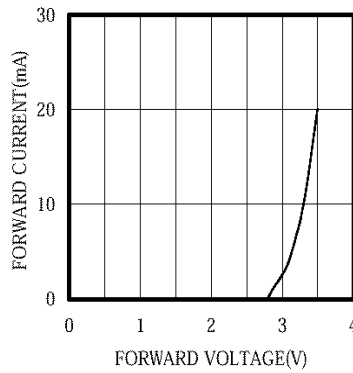
950 South Coast Drive, Suite 225
Costa Mesa, California 92626
Toll Free: 800.984.5337
Fax: 714.850.9314

MTRS5250T Graphs

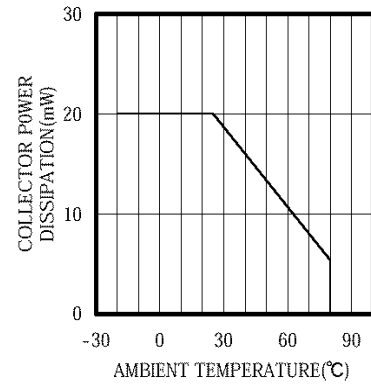
SPECTRAL OUTPUT



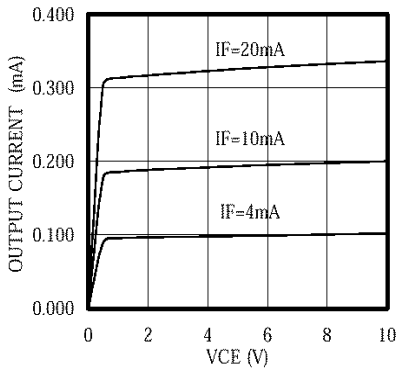
FORWARD I-V CHARACTERISTICS



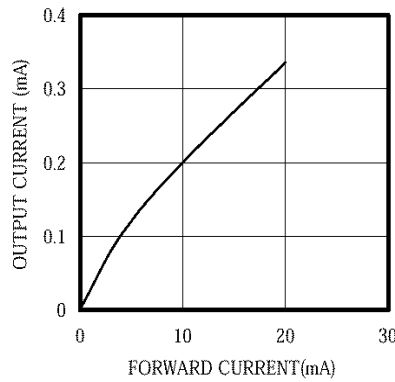
THERMAL DERATING CURVE



I_o vs VCE



IF VS I_o
VCE=10V



I_o VS DISTANCE

