

MTRS6140

Features

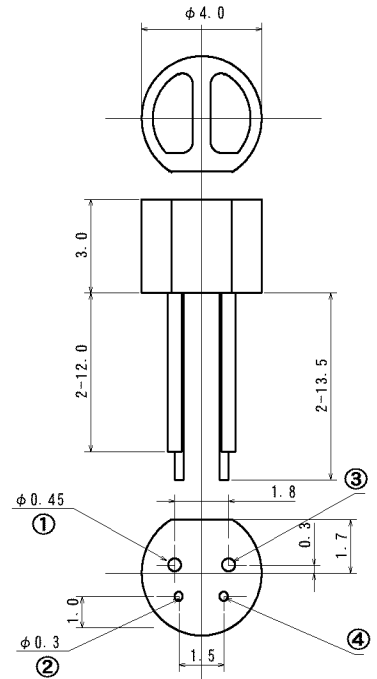
High Reliability
Compact

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	30	-	mA
Pulsed Forward Current	I _{FP}	50.00	tw=10μ S, T=10mS	A
Reverse Voltage	V _R	4	-	V
Power Dissipation	P _D	100.00	-	mW
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 PD Cathode
② LED Anode ④ PD Anode

Opto-Electrical Characteristics (Ta=25°C)

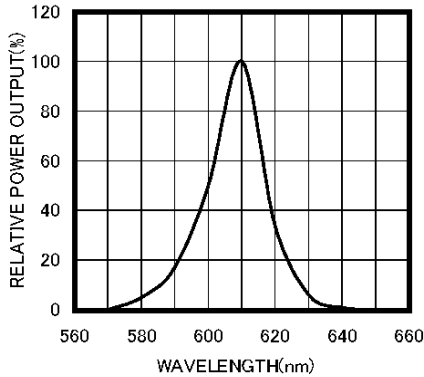
Characteristic	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	V _F	I _F =20mA	-	2.00	2.50	V
Reverse Current	I _R	V _R =4V	-	-	10	μA
Light Current	I _L	I _F =20mA, V _R =10V, d=1mm*	-	.55	-	μA
Dark Current	I _D	V _R =10V	-	-	100	μA
Peak Sensitivity Wavelength	λ _p	I _F =20mA	-	610	-	nm
Spectral Line Half Width	Δλ	I _F =20mA	-	35	-	nm
Cross-Talk	I _x	I _F =20mA, V _R =10V	-	-	10	%
Rise Time	T _r	V _R =10V, I _F =20mA, R _L =1KΩ	-	1000.00	-	ns
Fall Time	T _f	V _R =10V, I _F =20mA, R _L =1KΩ	-	1000.00	-	ns

* Measured by reflecting with Aluminum evaporated mirror (d=1.00mm)

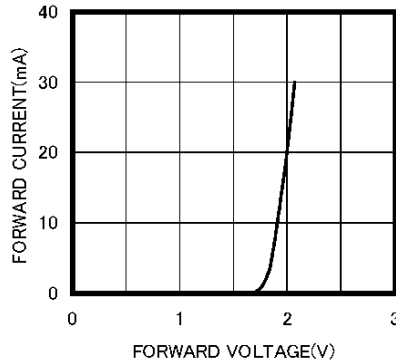
Company Headquarters
3 Northway Lane North
Latham, New York 12110
Toll Free: 800.984.5337
Fax: 518.785.4725

MTRS6140 Graphs

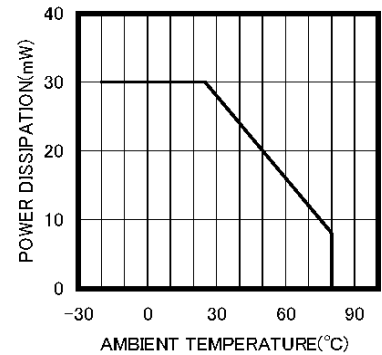
SPECTRAL OUTPUT



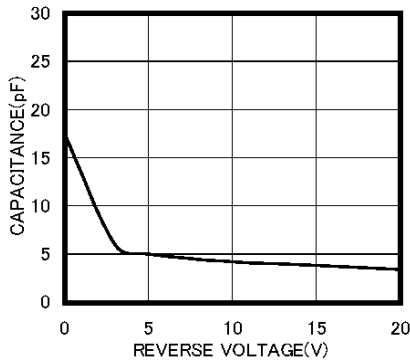
FORWARD I-V CHARACTERISTICS



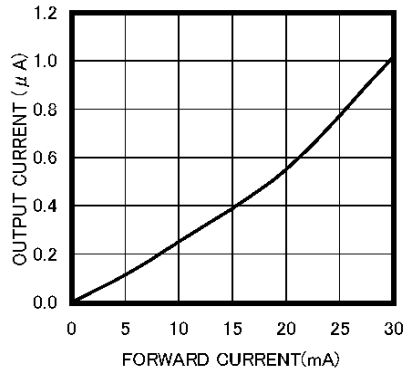
THERMAL DERATING CURVE



CAPACITANCE vs REVERSE VOLTAGE



IF VS I_o @VR=10V



I_o VS DISTANCE

