



- FEATURES**
- High Reliability
  - Compact( 4.0)
- APPLICATIONS**
- Card Reader
  - Bar-code Reader
  - Edge Sensing
  - Money-bill Reader

## 1. ABSOLUTE MAXIMUM RATINGS (Ta=25 )

ITEM	SYMBOL	RATINGS	UNIT
Forward Current (LED)	IF	40	mA
Plus Forward Current (LED)*	IFP	0.5	A
Reverse Voltage (LED)	VR	4	V
Power Dissipation (LED)	PD	100	mW
Collector-Emitter Voltage (PT)	Vce	20	V
Emitter-Collector Voltage (PT)	Vec	5	V
Collector Current (PT)	Ic	50	mA
Collector Power Dissipation (PT)	PC	75	mW
Total Power Dissipation	Ptot	100	mW
Operating Temp.	Topr	-20 TO 80	
Storage Temp.	Tstg	-30 TO 100	

\* Tw=10 μ S, T=10mS

## 2. ELECTRICAL & OPTICAL CHARACTERISTICS (Ta=25 )

ITEM	SYMBOL	CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	VF	IF=20mA		1.8	2.2	V
Reverse Current	IR	VR=4V		10		μ A
Peak Emission Wave Length	λ	IF=20mA		660		nm
Spectral Line Half Width		IF=20mA		25		nm
Dark Current (Iceo)	ID	Vce=10V			100	nA
Output Current	Io	IF=20mA,Vce=10V,d=1mm	800	1200		μ A
Cross-talk Current	Ix	IF=20mA,Vce=10V			1.0%	
Rise Time (10 to 90%)	Tr	Vce=5V,Io=0.1mA,RL=1K		30		μ S
Fall Time (10 to 90%)	Tf	Vce=5V,Io=0.1mA,RL=1K		30		μ S

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

