



# LITEON LITE-ON TECHNOLOGY CORPORATION

Property of LITON Only

## ABSOLUTE MAXIMUM RATINGS AT TA=25

PARAMETER	MAXIMUM RATING	UNIT
IR Diode Continuous Forward Current	50	mA
IR Diode Reverse Voltage	5	V
Transistor Collector Current	20	mA
Transistor Power Dissipation	75	mW
IR Diode Peak Forward Current (Pulse Wide = 10 $\mu$ S, 300 pps)	1	A
Diode Power Dissipation	60	mW
Phototransistor Collector-Emitter Voltage	30	V
Phototransistor Emitter-Collector Voltage	5	V
Operating Temperature Range	-25 to + 85	
Storage Temperature Range	-55 to + 100	
Lead Soldering Temperature [ 1.6mm (.063") Form Case ]	260 for 5 Seconds	

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## ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
<b>INPUT LED</b>						
Forward Voltage	V <sub>F</sub>		1.2	1.6	V	I <sub>F</sub> = 20mA
Reverse Current	I <sub>R</sub>			100	μ A	V <sub>R</sub> =5V
<b>OUTPUT PHOTOTRANSISTOR</b>						
Collector-Emitter Breakdown Voltage	V(BR) <sub>CEO</sub>	30			V	I <sub>C</sub> =1mA
Emitter-Collector Breakdown Voltage	V(BR) <sub>ECO</sub>	5			V	I <sub>E</sub> =100 μ A
Collector-Emitter Dark Current	I <sub>CEO</sub>			100	nA	V <sub>CE</sub> =10V
<b>COUPLER</b>						
Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>			0.4	V	I <sub>C</sub> =0.2mA I <sub>F</sub> =20mA
On State Collector Current	I <sub>c(ON)</sub>	0.5	2		mA	V <sub>CE</sub> =5V I <sub>F</sub> =20mA

## TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25 Ambient Temperature Unless Otherwise Noted)

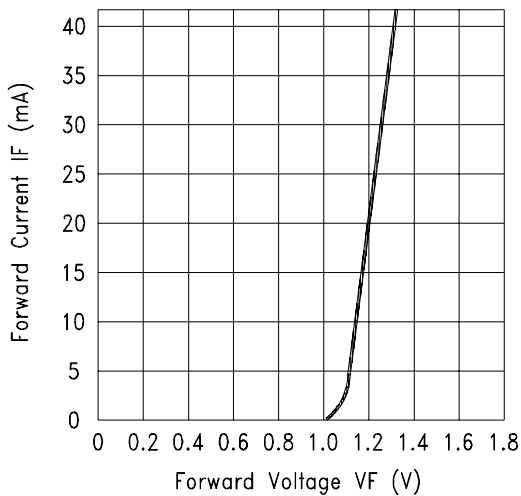


Fig.1 FORWARD CURRENT VS. FORWARD VOLTAGE

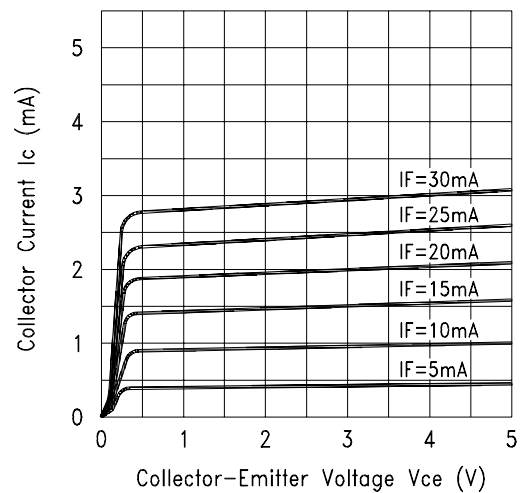


Fig.2 COLLECTOR CURRENT VS. COLLECTOR VOLTAGE

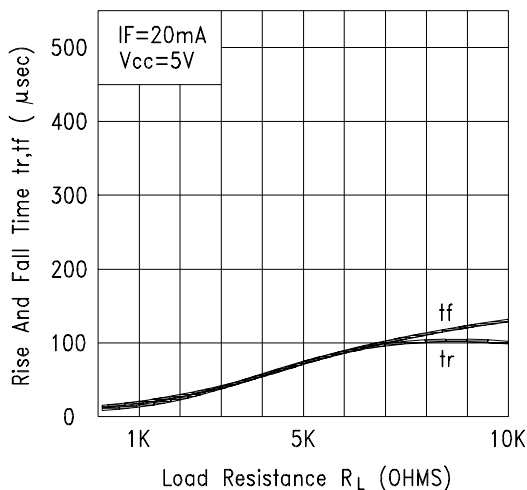


Fig.3 RISE AND FALL TIME VS. LOAD RESISTANCE

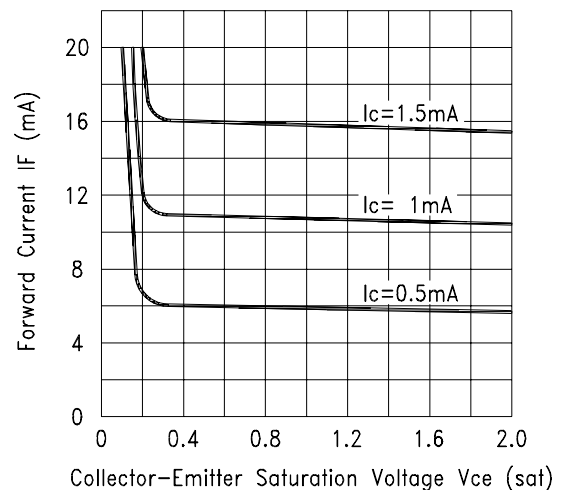


Fig.4 FORWARD CURRENT VS. Collector-Emitter Saturation Voltage