

ABSOLUTE MAXIMUM RATINGS AT T_A=25

PARAMETER	MAXIMUM RATING	UNIT
IR Diode Continuous Forward Current	60	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 μ S, 300 pps)	1	A
Diode Power Dissipation	100	mW
Phototransistor Collector-Emitter Voltage	30	V
Phototransistor Emitter-Collector Voltage	5	V
Operating Temperature Range	-25 to + 85	
Storage Temperature Range	-40 to + 100	
Lead Soldering Temperature [1.6mm(.063") From Case]	260 for 5 Seconds	

ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25

PARAMETER		SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
INPUT LED							
Forward Voltage		V _F		1.2	1.6	V	I _F = 20mA
Reverse Current		I _R			100	μ A	V _R =5V
OUTPUT PHOTOTRANSISTOR							
Collector-Emitter Breakdown Voltage		V(BR) _{CEO}	30			V	I _C =1mA
Emitter-Collector Breakdown Voltage		V(BR) _{ECO}	5			V	I _E =100 μ A
Collector-Emitter Dark Current		I _{CEO}			100	nA	V _{CE} =10V
COUPLER							
Collector-Emitter Saturation Voltage		V _{CE} (SAT)			0.4	V	I _C =0.2mA I _F =20mA
On State Collector Current		I _C (ON)	0.4			mA	V _{CE} =5V I _F =20mA
Response Time	Rise Time	t _r		3	15	μS	V _{CE} =5V, I _C =2mA R _L =100Ω
	Fall Time	t _f		4	20		

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25 Ambient Temperature Unless Otherwise Noted)

Fig.1 Power Dissipation vs. Ambient Temperature

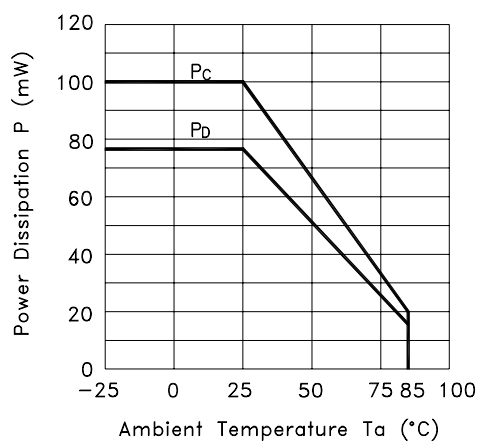


Fig.2 Forward Current vs. Forward Voltage

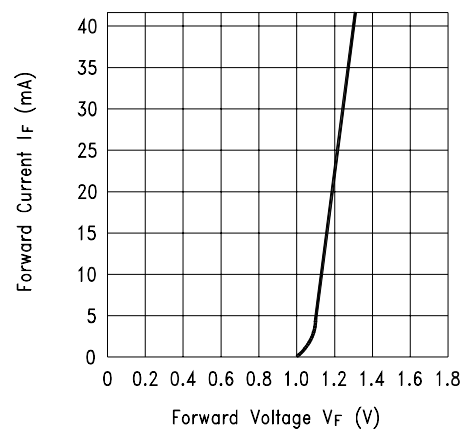


Fig.3 Collector Current vs. Forward Voltage

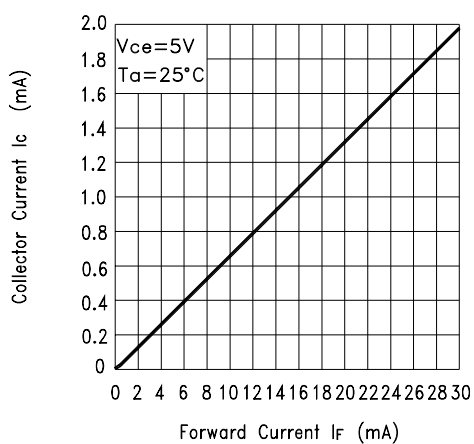
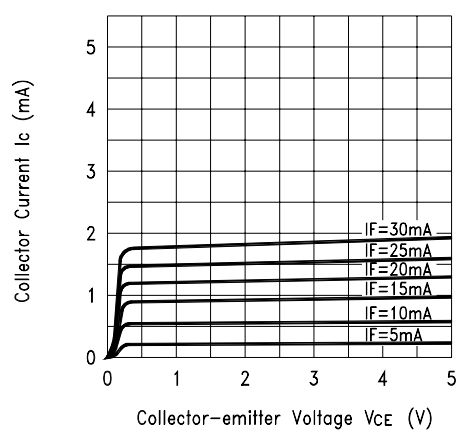


Fig.4 Collector Current vs. Collector-emitter Voltage



TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25 Ambient Temperature Unless Otherwise Noted)

Fig.5 Collector Current vs. Ambient Temperature

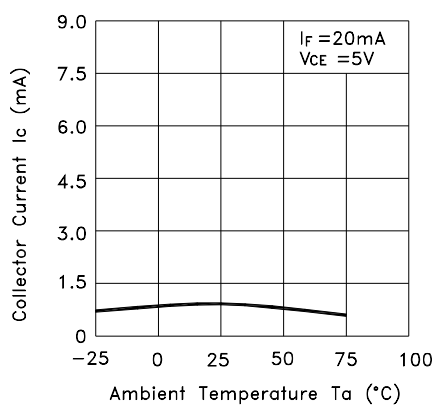


Fig.6 Collector-emitter Saturation Voltage vs. Ambient Temperature

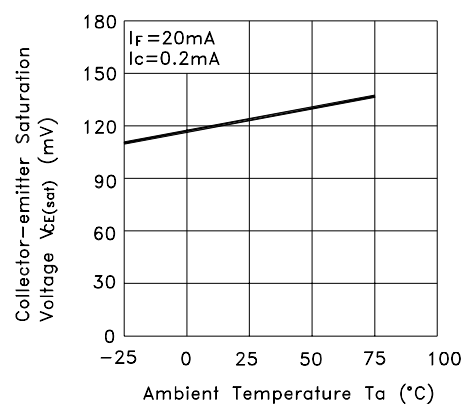
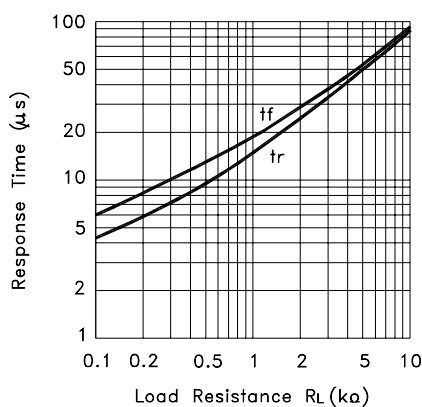
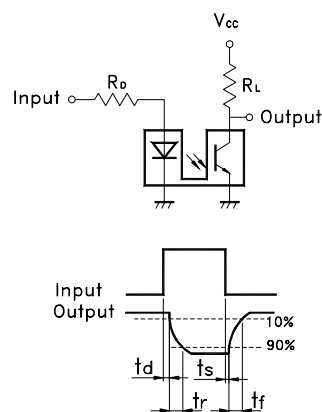


Fig.7 Response Time vs. Load Resistance



Test Circuit for Response Time



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