



LITE-ON TECHNOLOGY CORPORATION

Property of LITE-ON Only

FEATURES

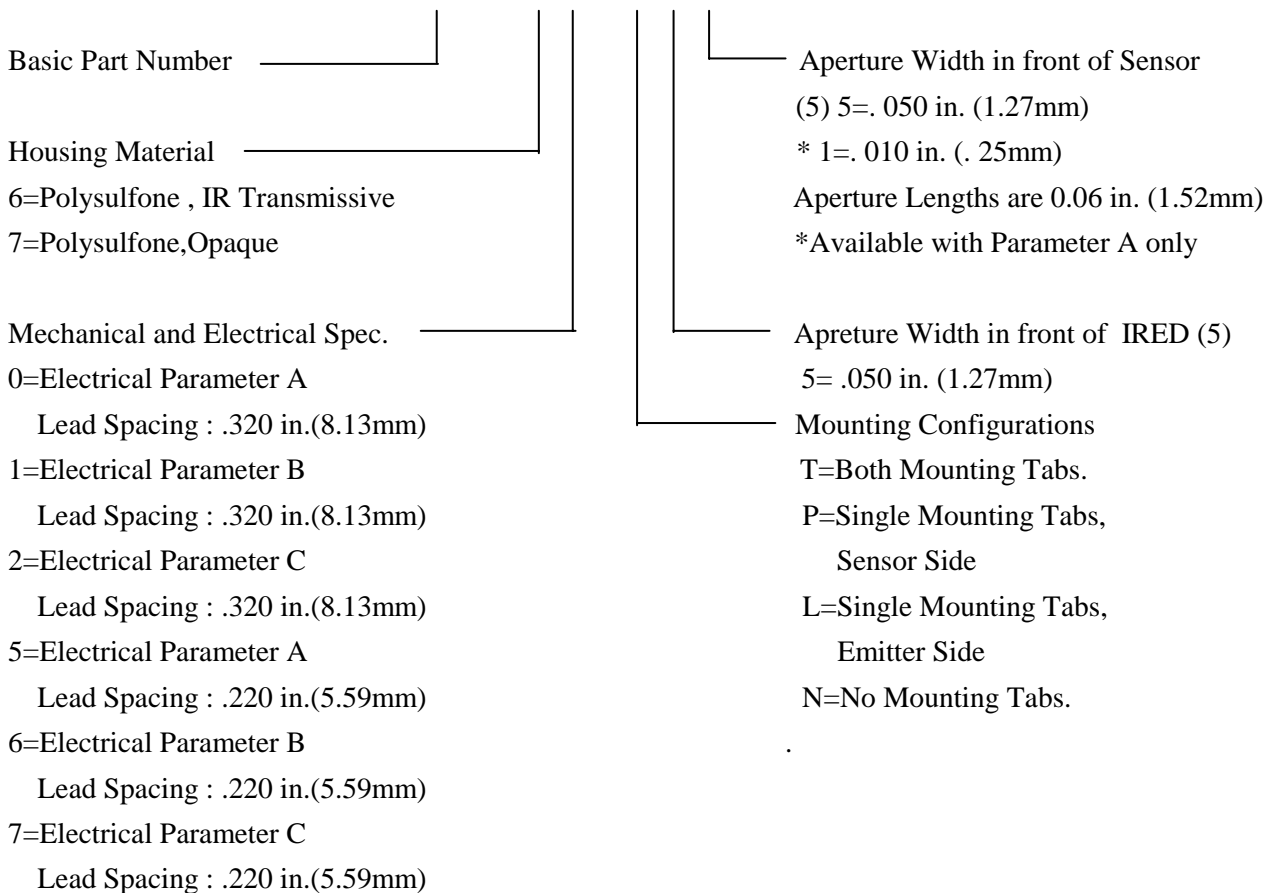
- * NON-CONTACT SWITCHING.
- * FAST SWITCHING SPEED.
- * FOR DIRECT PC BOARD OR DUAL-IN-LINE SOCKET MOUNTING.
- * CHOICE OF MOUNTING CONFIGURATION.

APPLICATION

- * FAX MACHINE
- * SCANNER
- * COPY MACHINE
- * DISK DRIVER

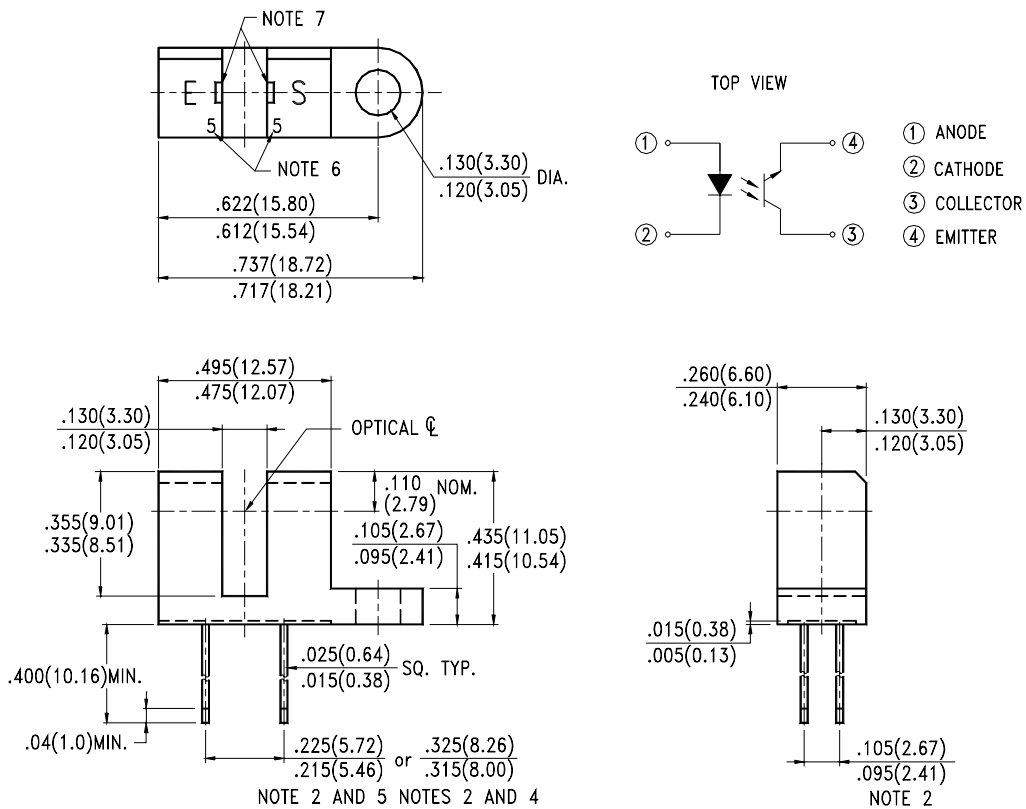
Part Numbering Guide

LTH - 8 X X - X X X



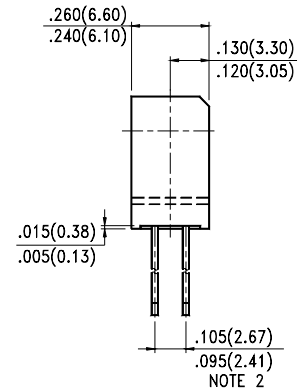
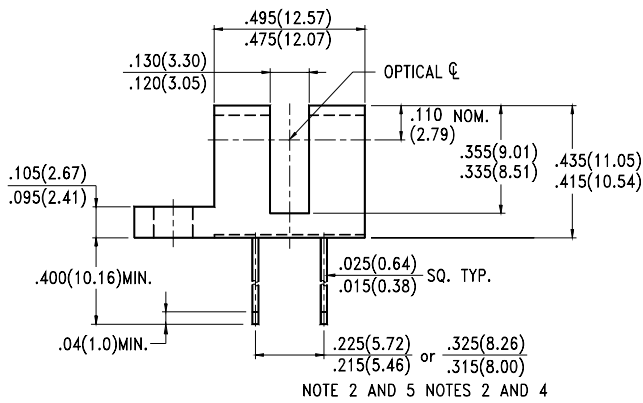
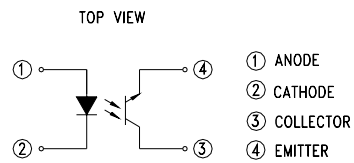
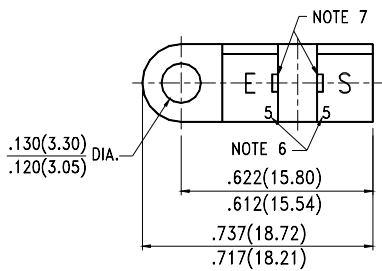
PACKAGE DIMENSIONS

Package Configuration P



PACKAGE DIMENSIONS

Package Configuration L





ABSOLUTE MAXIMUM RATINGS AT T_A=25

PARAMETER	SYMBOL	MAXIMUM RATING	UNIT
INPUT LED			
Power Dissipation	P _D	75	mW
Continuous Forward Current	I _F	50	mA
Peak Forward Current (Pulse Wide = 10μS , 300PPS)	I _{cp}	1	A
Reverse Voltage	V _R	5	V
OUTPUT PHOTOTRANSISTOR			
Power Dissipation	P _C	100	mW
Collector-Emitter Voltage	V _{CEO}	30	V
Emitter-Collector Voltage	V _{ECO}	5	V
Collector Current	I _C	20	mA
Operating Temperature Range	T _{opr}	-25 to + 85	
Storage Temperature Range	T _{stg}	-40 to + 100	
Lead Soldering Temperature [1.6mm (.063") Form Case]	T _{sol}	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	$I_F = 20\text{mA}$
Reverse Current	I_R			100	μA	$V_R=5\text{V}$
OUTPUT PHOTOTRANSISTOR						
Collector-Emitter Dark Current	I_{CEO}			100	nA	$V_{CE}=10\text{V}$
COUPLER						
Collector-Emitter Saturation Voltage	Parameter A	$V_{CE(SAT)}$			V	$I_C=0.25\text{mA}, I_F=20\text{mA}$
	Parameter B			0.4		$I_C=0.5\text{mA}, I_F=20\text{mA}$
	Parameter C					$I_C=0.9\text{mA}, I_F=20\text{mA}$
On State Collector Current	Parameter A	$I_{C(ON)}$	0.5		mA	$V_{CE}=5\text{V}, I_F=20\text{mA}$
	Parameter B		1.0			
	Parameter C		1.8			
Response Time	Rise Time	t_r		3	μS	$V_{CE}=5\text{V}, I_C=2\text{mA}$ $R_L=100$
	Fall Time	t_f		4		

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25 Ambient Temperature Unless Otherwise Noted)

Fig.1 Power Dissipation vs. Ambient Temperature

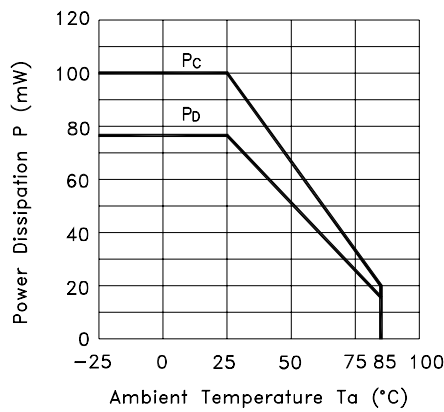


Fig.2 Forward Current vs. Forward Voltage

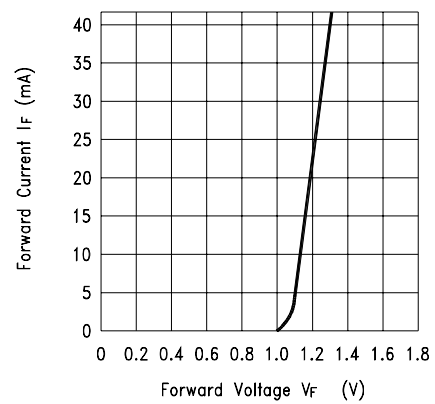


Fig.3 Collector Current vs. Collector-emitter Voltage

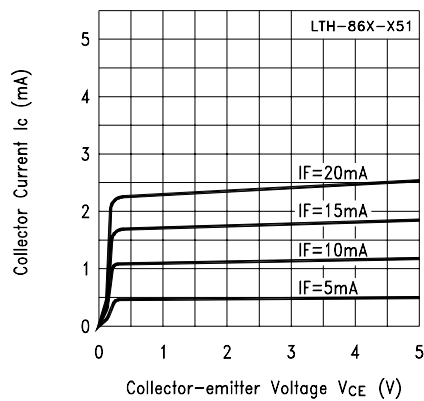
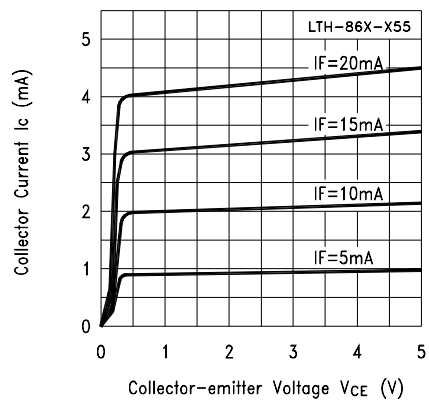


Fig.4 Collector Current vs. Collector-emitter Voltage



TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25 Ambient Temperature Unless Otherwise Noted)

Fig.5 Collector Current vs. Collector-emitter Voltage

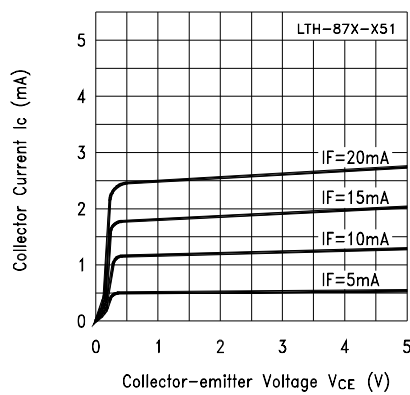


Fig.6 Collector Current vs. Collector-emitter Voltage

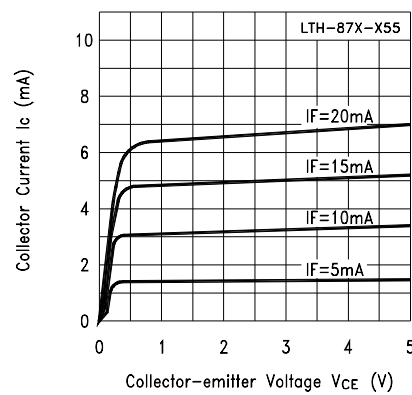


Fig.7 Collector Current vs. Ambient Temperature

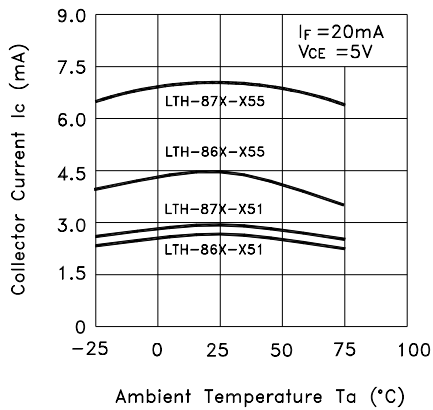
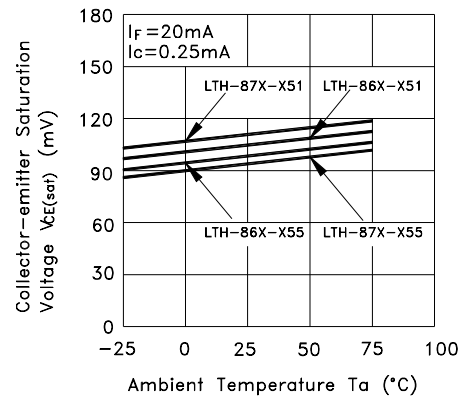


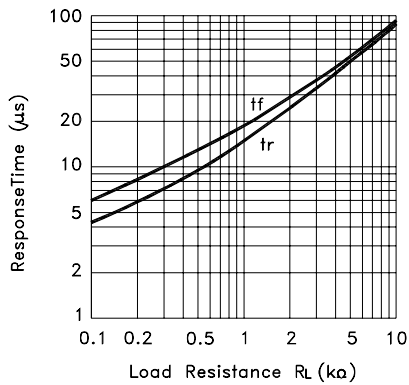
Fig.8 Collector-emitter Saturation Voltage vs. Ambient Temperature



TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25 Ambient Temperature Unless Otherwise Noted)

Fig.9 Response Time vs. Load Resistance



Test Circuit for Response Time

