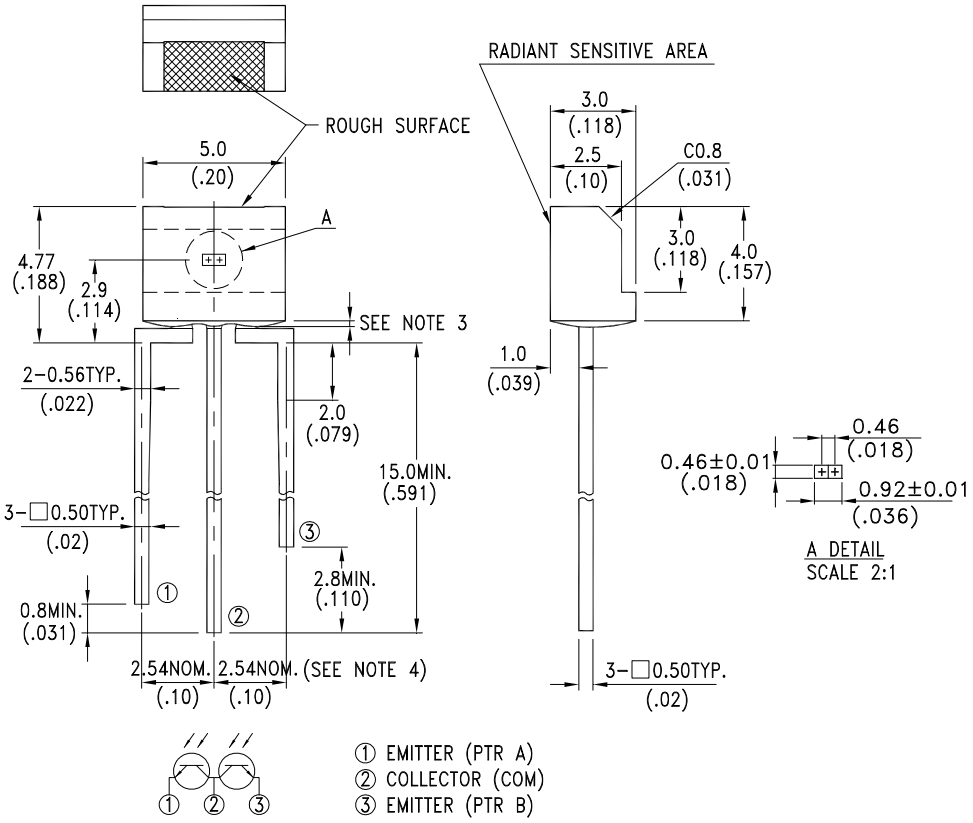
FEATURES

* WIDE RANGE OF COLLECTOR CURRENT
* HIGH SENSITIVITY
* FAST SWITCHING TINE
* THE LTR-5889DH IS A SPECIAL DARK GREEN PLASTIC PACKAGE THAT CUT THE VISIBLE FOR THE DETECTORS OF INFRARED APPLICATIONS

PACKAGE DIMENSIONS



NOTES:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25mm(.010") unless otherwise noted.
3. Protruded resin under flange is 1.5mm(.059") max.
4. Lead spacing is measured where the leads emerge from the package.
5. Specifications are subject to change without notice.

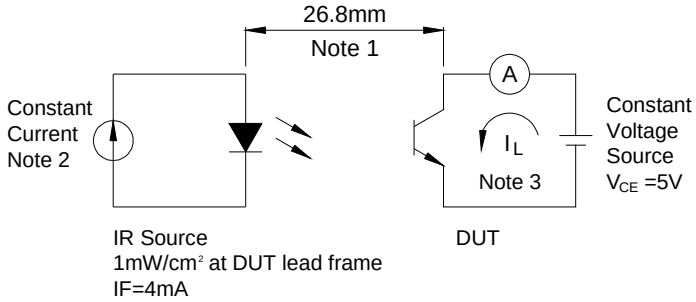
ABSOLUTE MAXIMUM RATINGS AT TA=25℃

PARAMETER	MAXIMUM RATING	UNIT
Power Dissipation	100	mW
Collector-Emitter Voltage	30	V
Emitter-Collector Voltage	5	V
Operating Temperature Range	-10℃ to + 50℃	
Storage Temperature Range	-55℃ to + 100℃	
Lead Soldering Temperature [1.6mm(.063") From Body]	260℃ for 5 Seconds	

ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25℃

PARAMETER	SYMBOL	MIN.	TYP.	MAX	UNIT	TEST CONDITION	BIN No.	Color Marking
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	30			V	Ic = 1mA Ee = 0mW/cm²		
Emitter-Collector Breakdown Voltage	$V_{(BR)ECO}$	5			V	IE = 100 μA Ee = 0mW/cm²		
Collector Emitter Saturation Voltage	$V_{CE(SAT)}$		0.1	0.4	V	Ic = 50 μA Ee = 1.0mW/cm²		
Rise Time	Tr		15		μs	Vcc = 5V Ic = 1mA R_L = 1KΩ		
Fall Time	Tf		18		μs			
Collector Dark Current	I_{CEO}		0.1	100	nA	V_{CE} = 10V Ee = 0mW/cm²		
On Stage Collector Current Ratio (I_{L1}/I_{L2})	R	0.8	1.0	1.2				
Average On State Collector Current Range Setting of LITE-ON Production (I_{L1}/I_{L2})/2	$I_{C(ON)}$	100		200	μA	V_{CE} = 5V Ee = 1mW/cm²	BIN A	Red
		200		300			BIN B	Black
		300		400			BIN C	Green
		400		500			BIN D	Blue
Average On State Collector Current Range Q.C Limits (I_{L1}/I_{L2}) / 2	$I_{C(ON)}$	80		240	μA	V_{CE} = 5V Ee = 1mW/cm²	BIN A	Red
		160		360			BIN B	Black
		240		480			BIN C	Green
		320		600			BIN D	Blue

On State Collector Current Test Method



Notes: 1. IR source package face to DUT lead frame.
2. IR source bias level calibrated for 1mW/cm² at DUT.
3. IL shown is one of two emitter currents, I_{L1} and I_{L2}.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTICS CURVES

(25℃ Ambient Temperature Unless Otherwise Noted)

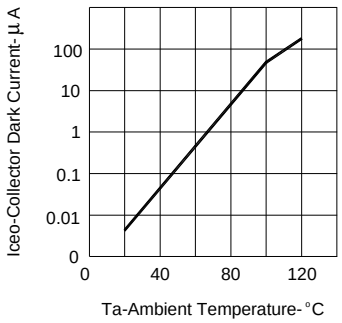


FIG.1 COLLECTOR DARK CURRENT VS AMBIENT TEMPERATURE

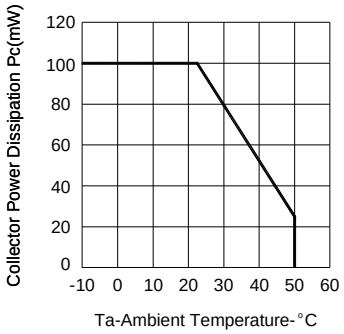


FIG.2 COLLECTOR POWER DISSIPATION VS AMBIENT TEMPERATURE

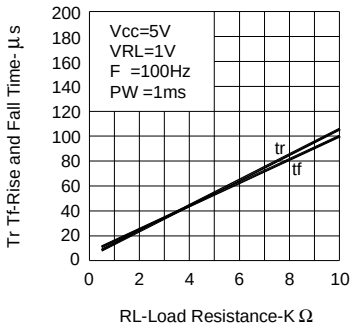


FIG.3 RISE AND FALL TIME VS LOAD RESISTANCE

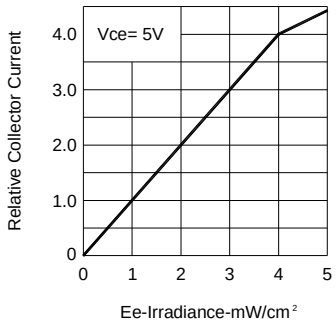


FIG.4 RELATIVE COLLECTOR CURRENT VS IRRADIANCE

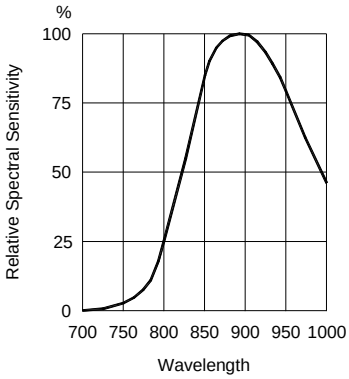


Fig.5 RELATIVE SPECTRAL SENSITIVITY VS. WAVELENGTH