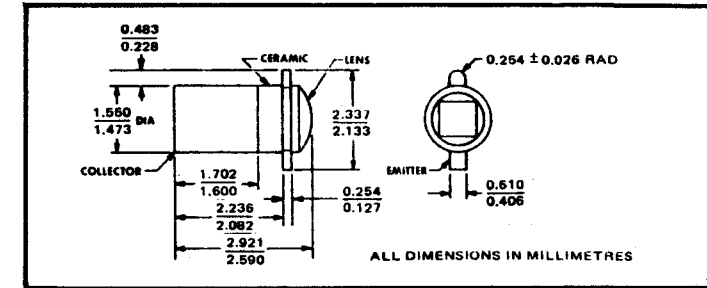


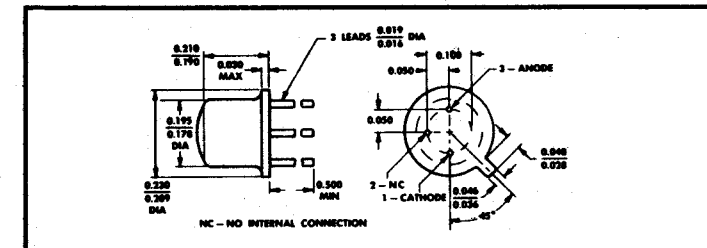
# 31 Optoelectronics

## Light Emitters

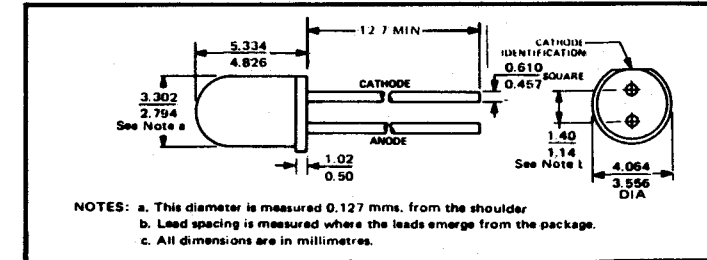
Device Type	Power Output		$\theta_{HP}$ typ	VF		$\lambda_p$ typ $\mu m$	Key Features
	min. mW	@ IF mA		max. V	@ IF mA		
TIL23	0.4	50	35°	1.5	50	0.93	Pill package for mounting on double-sided printed circuit board
TIL24	1.0	50	35°	1.5	50	0.93	
TIL25	0.7	50	35°	1.5	50	0.94	
TIL31	3.3	100	10°	1.75	100	0.94	
TIL33	2.5	100	80°	1.75	100	0.94	
TIL34	1.6	100	10°	1.75	100	0.94	Hermetically sealed TO18 package
TIL32	0.5	20	35°	1.6	20	0.94	
TIL38	6.0	100	60°	1.9	100	0.94	Low cost 5 mm plastic package



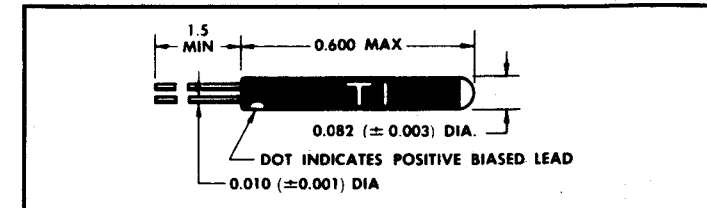
Pill Package



TO-18 Hermetic Seal



Low Cost Plastic Package



Hermetic Seal Glass Package ALL DIMENSIONS IN INCHES

## Light Sensors

Device Type	Type	Light Current			Dark Current		Power Diss mW	Key Features
		min. mA	max. mA	@ V	max. nA	@ V		
LS600	Phototransistor	0.8	—	5	25	30	50	Pill Package
LS602	Phototransistor	0.5	—	5	25	30	50	
LS611	Phototransistor	0.5	2	5	25	30	50	
LS612	Phototransistor	1	3	5	25	30	50	
LS613	Phototransistor	2	4	5	25	30	50	
LS614	Phototransistor	3	5	5	25	30	50	
LS615	Phototransistor	4	6	5	25	30	50	
LS616	Phototransistor	5	7	5	25	30	50	
LS617	Phototransistor	6	8	5	25	30	50	
LS618	Phototransistor	7	9	5	25	30	50	
LS619	Phototransistor	8	—	5	25	30	50	
TIL63	Phototransistor	0.4	—	5	25	30	50	
TIL64	Phototransistor	0.4	1.6	5	25	30	50	
TIL65	Phototransistor	1	4	5	25	30	50	
TIL66	Phototransistor	2.5	10	5	25	30	50	
TIL67	Phototransistor	6	—	5	25	30	50	
TIL78	Phototransistor	1	—	5	25	30	50	
TIL81	As Phototransistor	5	—	5	100	10	250	
TIL99	As Photodiode	170* $\mu A$ typ	—	0-50	10	30	250	
	As Phototransistor	1	—	5	100	10	250	
	As Photodiode	40* $\mu A$ typ	—	0-50	10	10	250	
TIL100	Photodiode	6 A/W	—	50	100	50	250	Low-cost "side looker" package
LS400	Phototransistor	1	—	5	25	30	50	
TIL401	Phototransistor	0.5	3	5	25	30	50	Glass, hermetically sealed
TIL402	Phototransistor	2	6	5	25	30	50	
TIL403	Phototransistor	5	10	5	25	30	50	
TIL404	Phototransistor	8	16	5	25	30	50	
TIL405	Phototransistor	10	20	5	25	30	50	

Pill package designed for mounting on double-sided printed circuit board

Low-cost header with epoxy lens. Operating temperature range—40°C to 80°C

Low-cost plastic package

TO-18 package with narrow field of view

Similar to TIL81 except flat lens

Low-cost "side looker" package

Glass, hermetically sealed