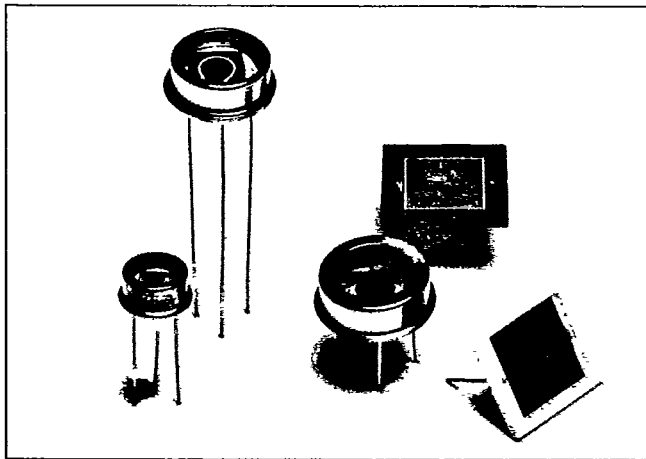
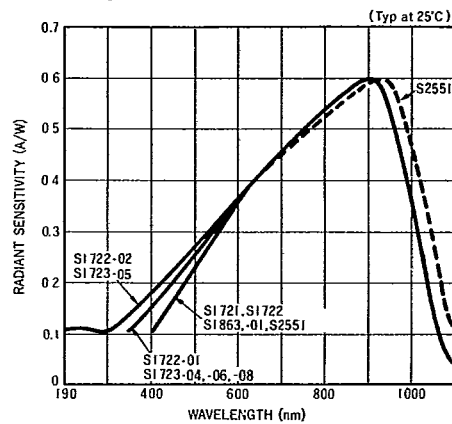


PIN Silicon Photodiodes

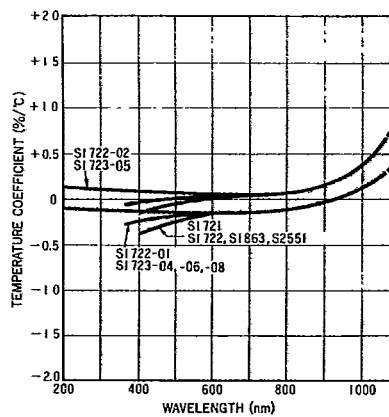
Type No.	Features	Outlines / Window Materials	Package	Photosensitive Surface		Spectral Response		Characteristics (at 25°C)				
				Size (mm)	Effective Area (mm ²)	Range (nm)	Peak Wave-length (nm)	Radiant Sensitivity Typ. (A/W)			Short Circuit Current I _{sh} , 100 lux	
								Peak Wave-length	633nm He-Ne Laser	930nm GaAs LED	Min. (μA)	Typ. (μA)
S1721	2.54mm dia. sensitive area, for visible to IR	⑦/K	TO-5	2.54 dia.	5.1	400~1060	900±50	0.6	0.4	0.6	3.6	4.5
S1722	4.1mm dia. sensitive area, for visible to IR	①/K	TO-8	4.1 dia.	13.2	400~1060	900±50	0.6	0.4	0.6	12	15
S1722-01	Enhanced UV sensitivity					320~1060						
S1722-02	Fused silica window, high UV sensitivity					①/Q	190~1060	920±50	0.5	0.38		
S1863	5.0mm dia. sensitive area, for visible to IR	①/K	TO-8	5.0 dia.	19.6	400~1060	900±50	0.6	0.4	0.6	14	17
S1863-01		②/K	14mm dia. TO-8									
S1723-04	10 x 10mm sensitive area, for visible to IR	④/R	Ceramic	10 x 10	100	320~1060	900±50	0.6	0.4	0.6	65	80
S1723-08	White substrate version of S1723-04											
S1723-06	Low dark current version of S1723-08					190~1060	920±50	0.5	0.38	0.5		
S1723-05	Fused silica window, high UV sensitivity					②/Q						
S2551	For CT application, etc.	④/R	Ceramic	1.2 x 29.1	35	320~1100	940±50	0.6	0.4	0.6	24	32



• Spectral Response



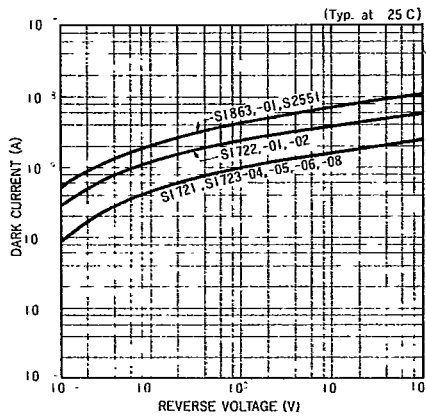
• Temperature Characteristic of I_{sh}



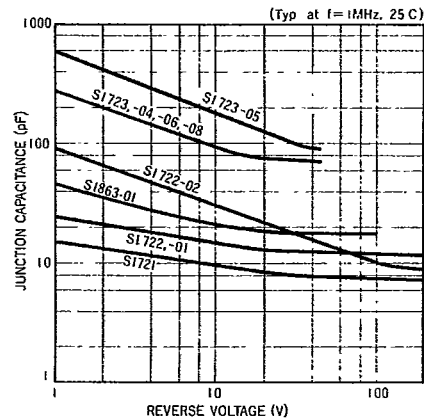
④ See pages 34 to 37 for outlines.
 Window materials are
 K: Borosilicate glass
 Q: Fused silica
 R: Resin coating

Characteristics (at 25°C)							Maximum Ratings					Type No.	
Dark Current I_d Max. (nA)	Temperature Dependence of Dark Current Typ. (Times/°C)	Junction Capacitance C_j Typ. (pF)	Rise Time t_r $R_L = 50\Omega$ Typ. (ns)	Cutoff Fre- quency f_c Typ. (MHz)	NEP Typ. (W/Hz ^{1/2})	D^* Typ. (cmHz ^{1/2} /W)	Reverse Voltage $V_{Rmax.}$ (V)	Current I max. (mA _p)	Power Dissipation P max. (mW)	Temperature Range			
										Operating (°C)	Storage (°C)		
10 ($V_R=30V$)	1.15	8 ($V_R=30V$)	3 ($V_R=30V$)	50 ($V_R=30V$)	2×10^{-14} ($V_R=30V$)	4×10^{12} ($V_R=30V$)	100	2	50	-20~+60	-55~+100	S1721	
30 ($V_R=100V$)	1.15	12 ($V_R=100V$)	1 ($V_R=100V$)	300 ($V_R=100V$)	1×10^{-13} ($V_R=100V$)	4×10^{12} ($V_R=100V$)	200	2	50	-20~+60	-55~+100	S1722	
		10 ($V_R=100V$)		100 ($V_R=100V$)								S1722-01	
50 ($V_R=50V$)	1.15	17 ($V_R=50V$)	2 ($V_R=50V$)	80 ($V_R=50V$)	1×10^{-13} ($V_R=50V$)	4×10^{12} ($V_R=50V$)	100	2	50	-20~+60	-55~+100	S1863	
												S1863-01	
10 ($V_R=30V$)	1.15	70 ($V_R=30V$)	15 ($V_R=30V$)	30 ($V_R=30V$)	2×10^{-13} ($V_R=30V$)	5×10^{12} ($V_R=30V$)	50	2	100	-20~+60	-20~+80	S1723-04	
												5 ($V_R=30V$)	S1723-08
												10 ($V_R=30V$)	S1723-06
1 ($V_R=10mV$)	1.15	250 ($V_R=0V$)	3000 ($V_R=0V, R_L=1k\Omega$)	—	2×10^{-14} ($V_R=0V$)	3×10^{13} ($V_R=0V$)	5	2	50	-20~+60	-20~+80	S2551	

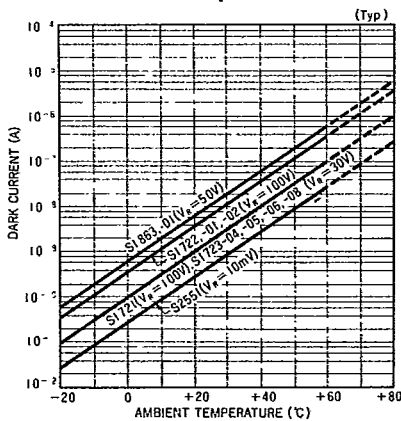
• Dark Current vs. Reverse Voltage



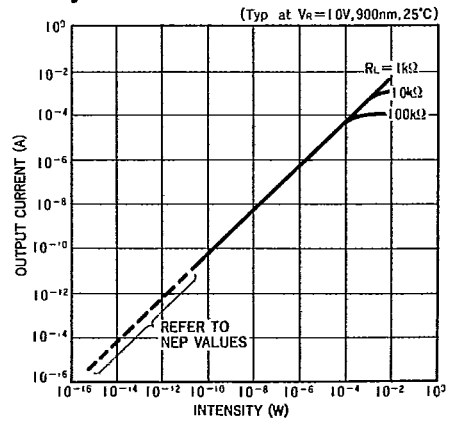
• Junction Capacitance vs. Reverse Voltage



• Dark Current vs. Temperature



• Linearity

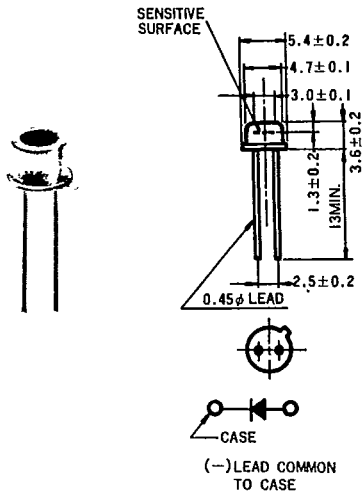


Dimensional Outlines

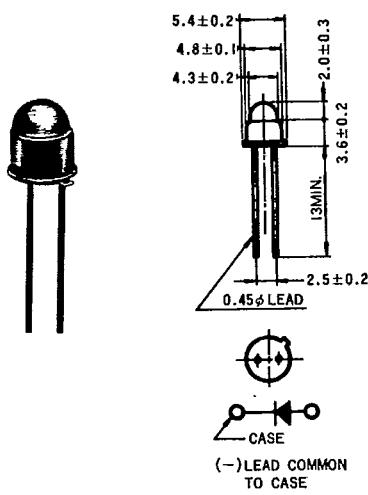
T-91-20

Unit: mm

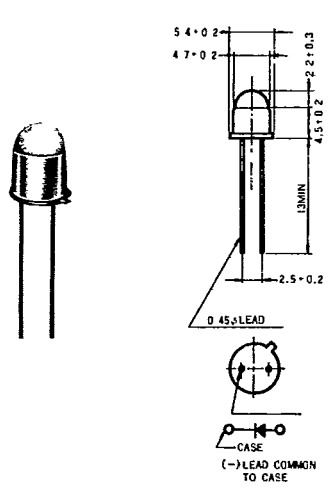
① S1226-18BQ etc.



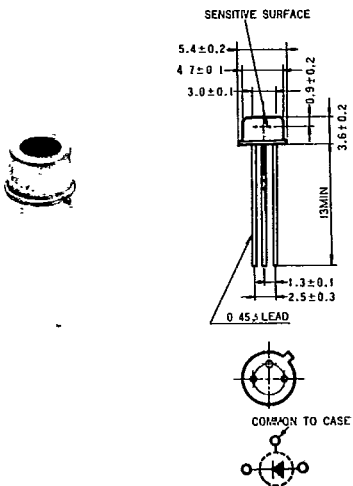
② S2386-18L etc.



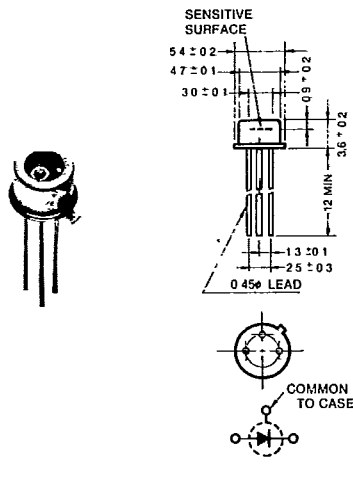
③ S1190-01 etc.



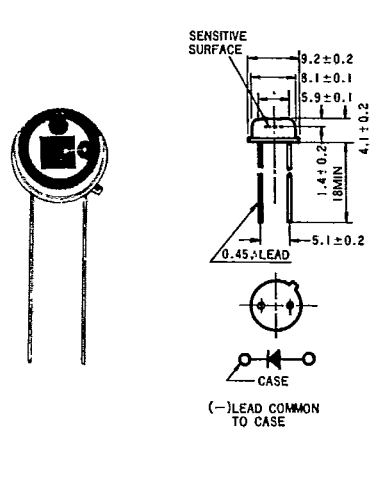
④ S1188-02, S2216-01, etc.



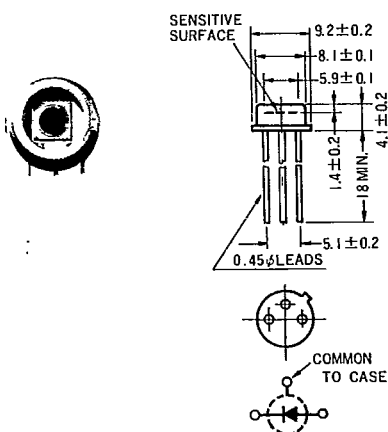
⑤ S2381, S2382, S2383



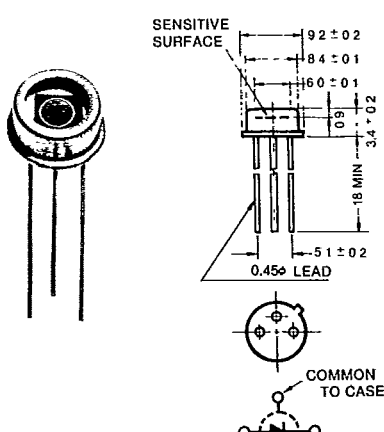
⑥ S1226-5BQ etc.



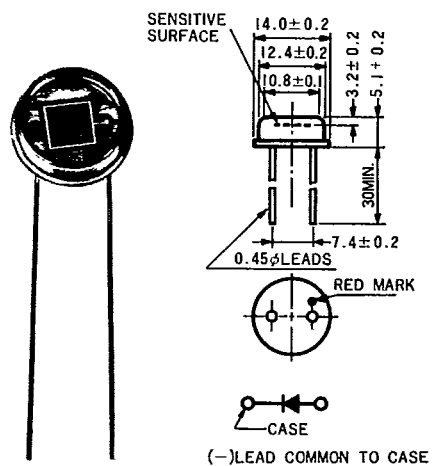
⑦ S1721



⑧ S2384

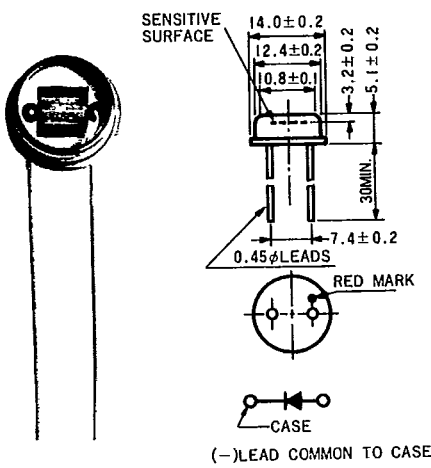


⑨ S1226-8BQ etc.

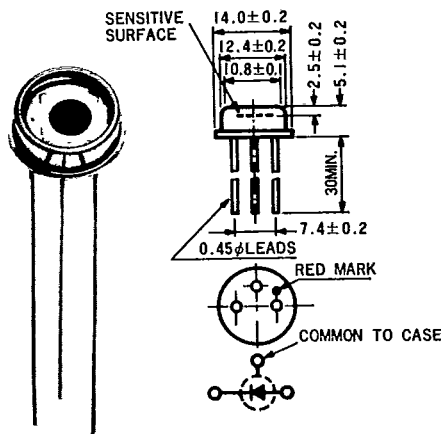


Unit: mm

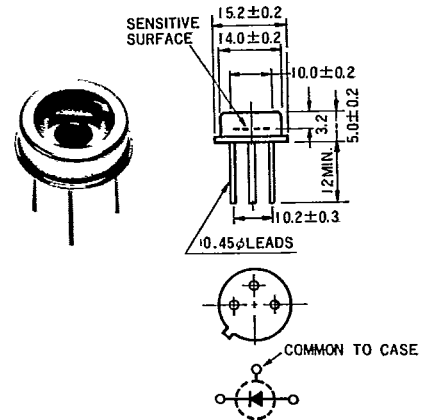
10 G1117, G1737



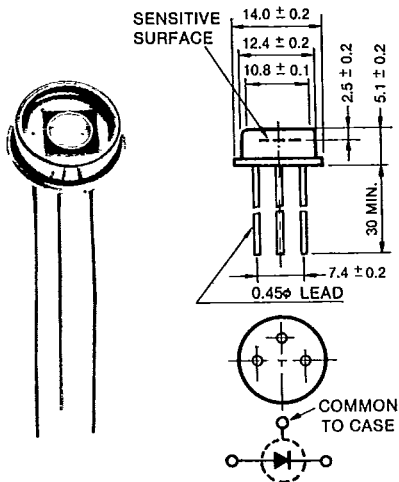
11 S1722, S1863, etc.



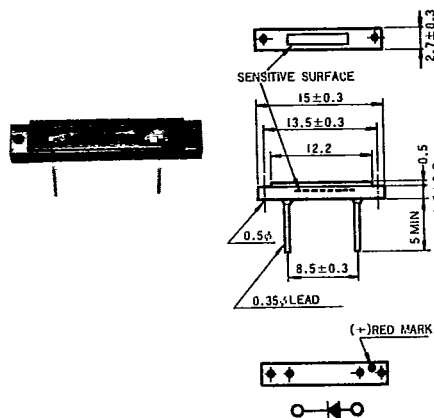
12 S1863-01



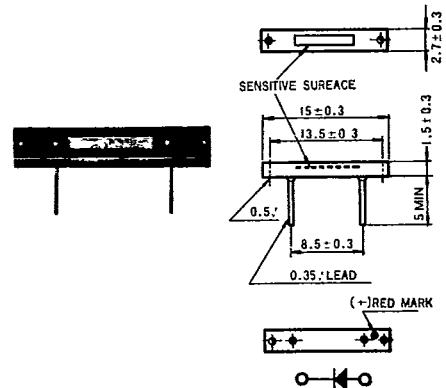
13 S2385



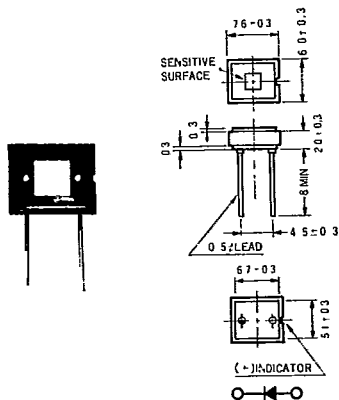
14 S1227-16BQ etc.



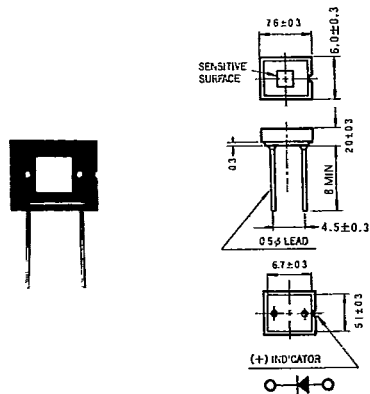
15 S1227-16BR etc.



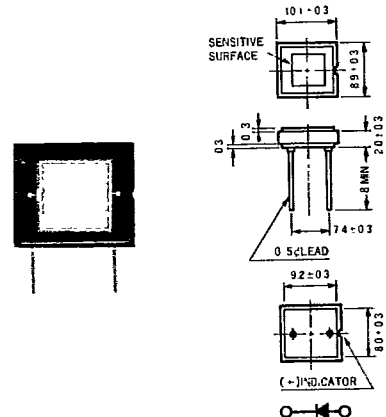
16 S1227-33BQ etc.



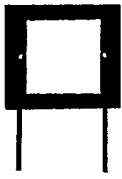
17 S1227-33BR etc.



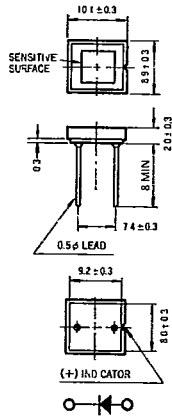
18 S1227-66BQ etc.



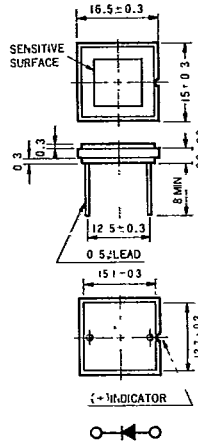
19 S1227-66BR etc.



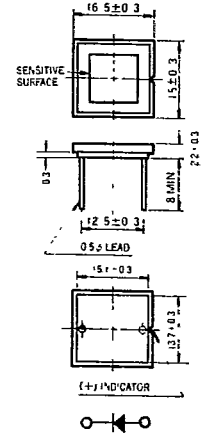
G1120
G1740



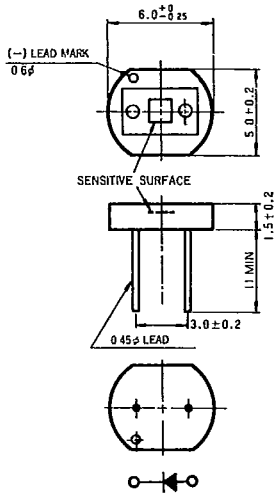
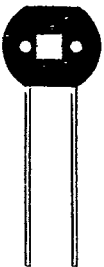
20 S1227-1010BQ etc.



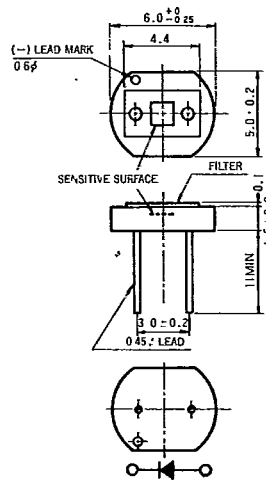
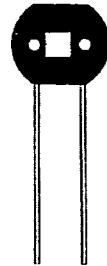
21 S1227-1010BR etc.



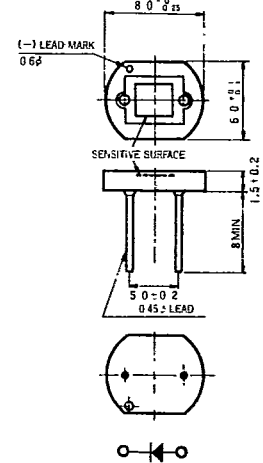
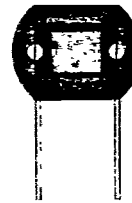
22 S1087-01, G1118, G1738



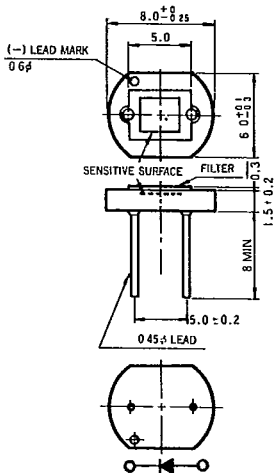
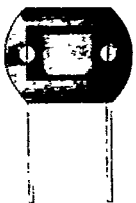
23 S1087, S1087-03



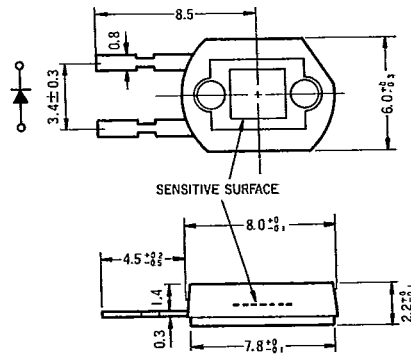
24 S1133-01, S1133-11, etc.



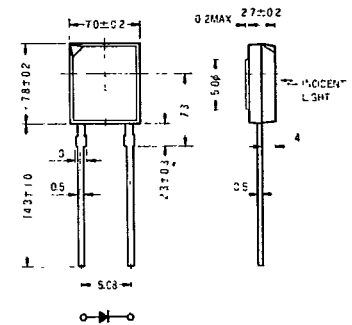
25 S1133, S1133-03, etc.



26 S1787 Series



27 S2506, S2506-01



Unit: mm

28 S2856, S2802

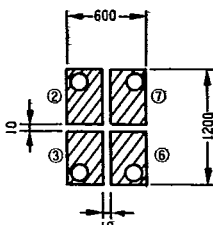
29 S2164, S2164-01

S2802

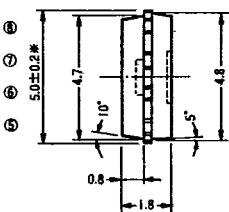
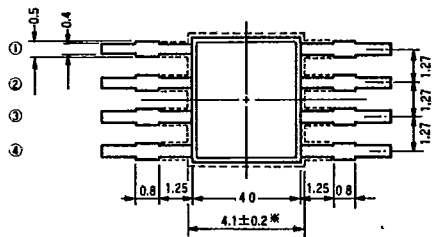
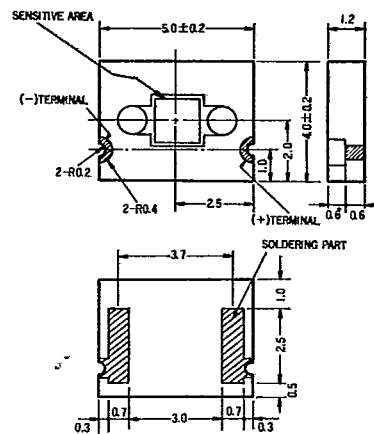
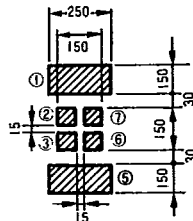


Details of Sensitive Area
(Unit: μm)

S2856



S2802



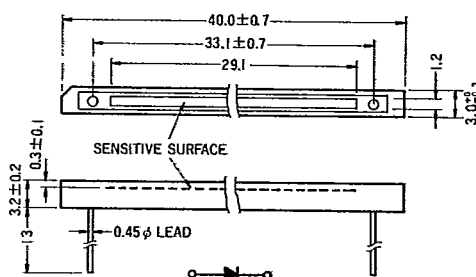
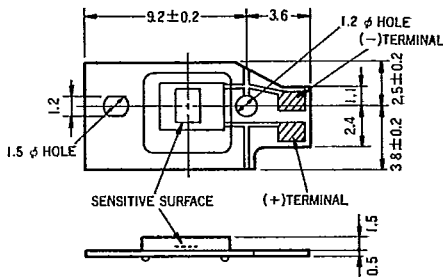
PIN CONNECTION

	S2856	S2802
①	NC	ANODE 1
②	ANODE 1	ANODE 2
③	ANODE 2	ANODE 3
④	CATHODE	CATHODE
⑤	NC	ANODE 4
⑥	ANODE 3	ANODE 5
⑦	ANODE 4	ANODE 6
⑧	CATHODE	CATHODE

* INCLUDING BURR

30 S2357

31 S2551



* The spacings of the leads in the figures are indicated as center-to-center dimensions. The photograph shows a typical type.