

MS SERIES

ZETEX SEMICONDUCTORS

SILICON MESA PHOTOCELLS

T-41-49

A range of silicon photovoltaic cells of mesa construction available in sizes from micro-miniature to large active area for general purpose use.

Unencapsulated cells are coated with a special varnish to protect against contamination and moisture ingress.

Encapsulated cells are set into tough bakelite or epoxy housings with stud or pin mountings (suffix E).

Devices are graded for standard use under both high (suffix A) and low (suffix B) light levels.

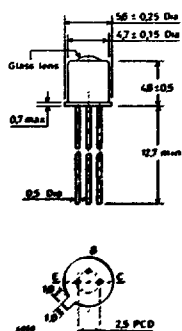
TYPICAL CHARACTERISTICS (at 25°C).

Wavelength of Peak Sensitivity	λ_p	850nm
Spectral Bandwidth to 10% λ_p	$\Delta\lambda_{0.1}$	400 to 1100nm

Type	Active Area mm	3000 lumens/sq.ft. *		200 lumens/sq.ft. *		Comments
		V_{oc} mV	I_{sc} mA	V_{oc} mV	I_{sc} mA	
MS1A	3.48 × 1.83	500	1.0	—	—	Miniature for punched tape or punched card reading systems
MS1AE	3.48 × 1.83	500	1.0	—	—	
MS1B	3.48 × 1.83	500	1.0	350	0.065	
MS1BE	3.48 × 1.83	500	1.0	350	0.065	
MS2A	18.85 × 11.63	500	27	—	—	
MS2AE	18.85 × 11.63	500	31	—	—	
MS2B	18.85 × 11.63	500	31	400	2.0	
MS2BE	18.85 × 11.63	500	34	400	2.3	
MS4A	6.15 × 5.26	500	5	—	—	Photovoltaic for high and low light level applications
MS4B	6.15 × 5.26	500	5	350	0.33	
MS5A	12.5 × 5.26	500	10	—	—	
MS5B	12.5 × 5.26	500	10	350	0.66	
MS6A	18.85 × 5.26	500	15	—	—	
MS6B	18.85 × 5.26	500	15	350	0.99	
MS7A	25.2 × 5.26	500	20	—	—	
MS7B	25.2 × 5.26	500	20	350	1.32	
MS9A	2.13 × 0.99	500	0.3	—	—	Micro-miniature for punched tape or punched card reading systems for high light level applications
MS9AE	2.13 × 0.99	500	0.3	—	—	
MS9B	2.13 × 0.99	500	0.3	350	0.02	
MS9BE	2.13 × 0.99	500	0.3	350	0.02	
MS11A	23.4	500	48	—	—	Large area photovoltaic
MS11AE	23.4	500	54	—	—	
MS11B	23.4	550	54	330†	3.6	
MS11BE	23.4	550	60	330†	4.0	

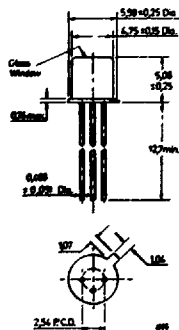
*Illumination source is a tungsten filament lamp at 2856°K colour temperature †Minimum

PACKAGE OUTLINES



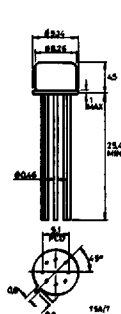
BPX25, ZM100/110
(TO-18 Lens Glass)

Fig. 1



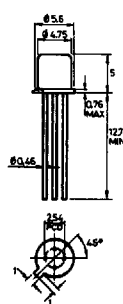
BPX29
(TO-18 Glass Window)

Fig. 2



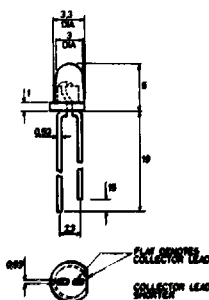
ZNP100
(TO-5 Glass Window)

Fig. 3



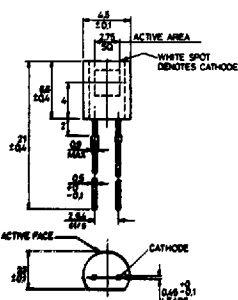
ZNP102/3
(TO-72 Glass Window)

Fig. 4



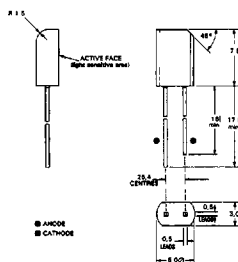
ZMP31
T1 3mm Clear Plastic

Fig. 5



BPW41D

Fig. 6



BPW41C/50C

Fig. 7