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Technical Data Sheet

MODEL NO : P776M5

3528 Package 3.5*2.8mm Photo Transistor

Features :

- Compatible with automatic placement equipment
- Compatible with reflow solder process
- Package in 8mm tape on 7" diameter reels.

Applications :

- Miniature switch
- Counters and sorter
- Position sensor

Dice material	Resin	Lens Color
		Black
Silicon	Silicon	

Electrical/Optical Characteristics(Ta=25°C)

Parameter	Test Condition	Symbol	Value			Unit
			Min	Typ	Max	
Wavelength Of Peak Sensitivity	--	λ_p		940		nm
Collector-emitter breakdown voltage	$I_{CEO} = 100\mu A$	BV_{CEO}	30	--	--	V
Emitter-collector breakdown voltage	$I_{CEO} = 100\mu A$	BV_{CEO}	5	--	--	V
Collector-emitter saturation voltage	$I_C = 2\text{ mA}$ $I_B = 100\mu A$	$V_{CE(SAT)}$	--	0.2	0.4	V
Collector-Base Breakdown voltage	$I_{CBO} = 100\mu A$	BV_{CBO}	40			V
Collector dark current	$V_{CE} = 20V$	I_{CEO}	--	--	0.4	μA

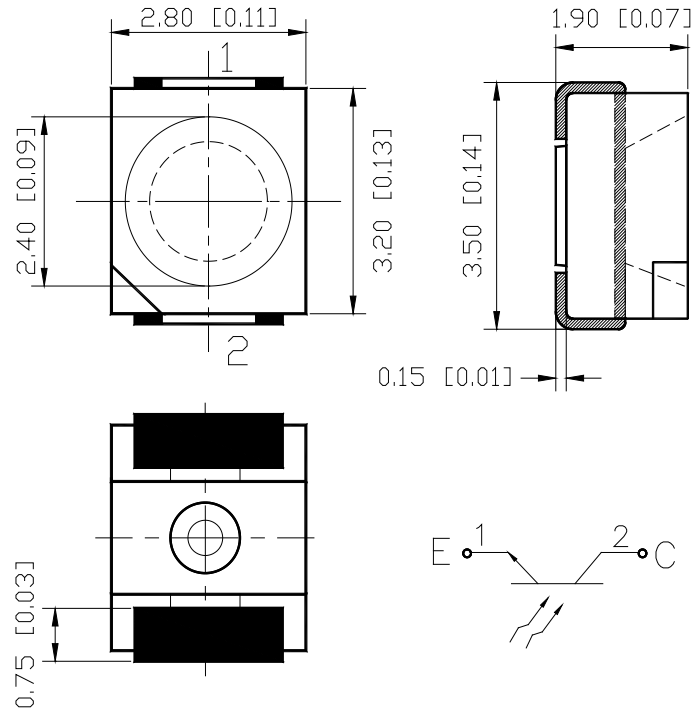


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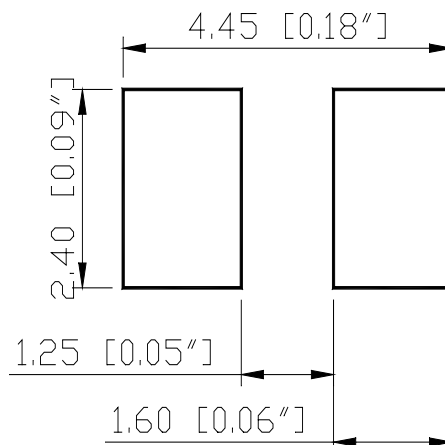
Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Value	Unit
Power dissipation	PD	100	mW
Collector-emitter voltage	VCEO	30	V
Emitter-collector voltage	VECO	5	V
Operating temperature range	TOP	-40 ~+80	°C
Storage temperature range	TSTG	-40 ~+85	°C

PACKAGING DIMENSIONS



RECOMMEND PAD LAYOUT





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FIG.1 COLLECTOR DARK CURRENT VS. AMBIENT TEMPERATURE

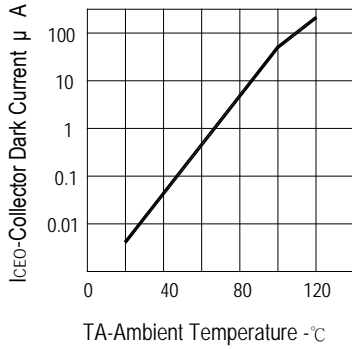


FIG.2 NORMALIZED COLLECTOR CURRENT VS. AMBIENT TEMPERATURE

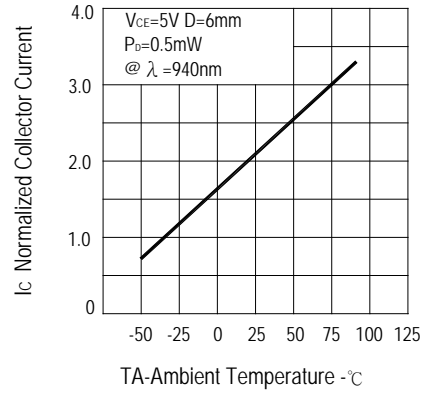


FIG.3 RISE AND FALL TIME VS. LOAD RESISTANCE

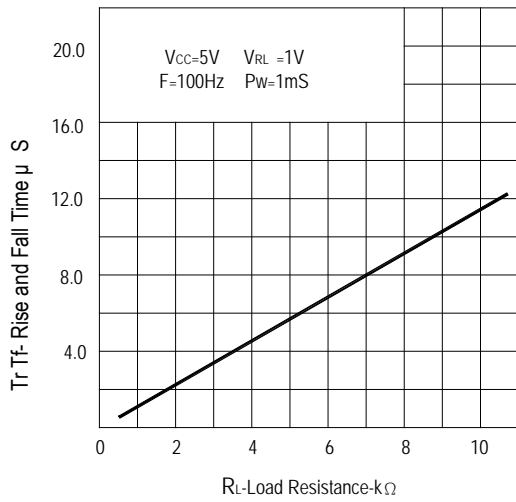
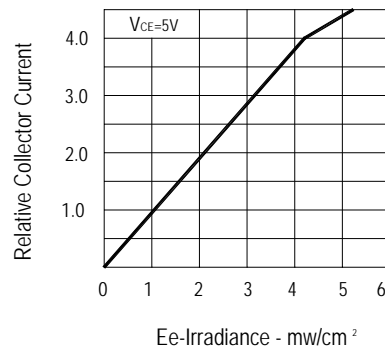
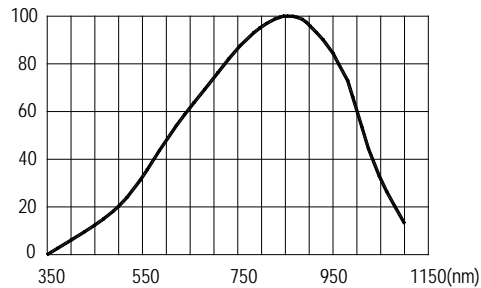


FIG.4 RELATIVE COLLECTOR CURRENT VS. IRRADIANCE



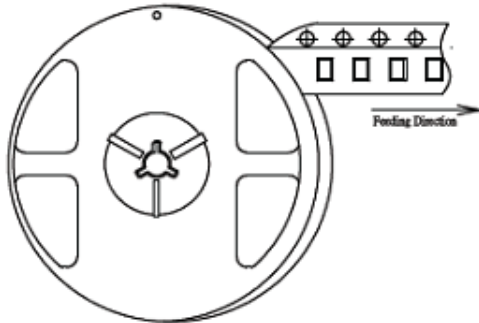
Relative Spectral Response (%)



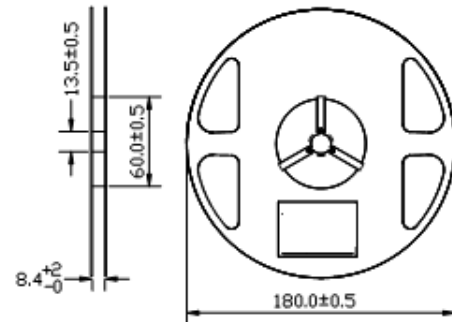


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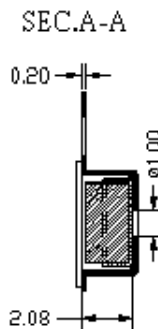
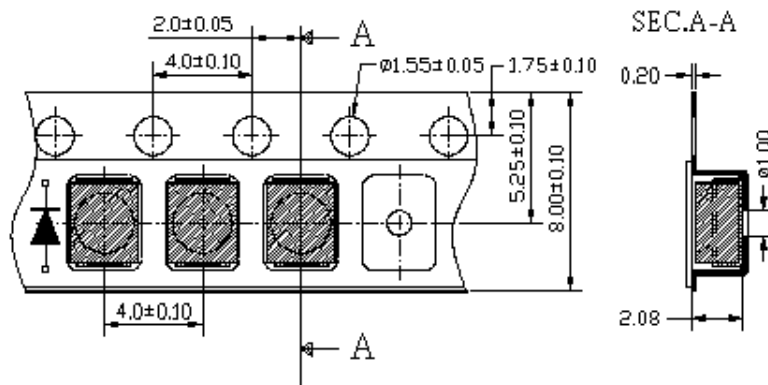
● Feeding Direction



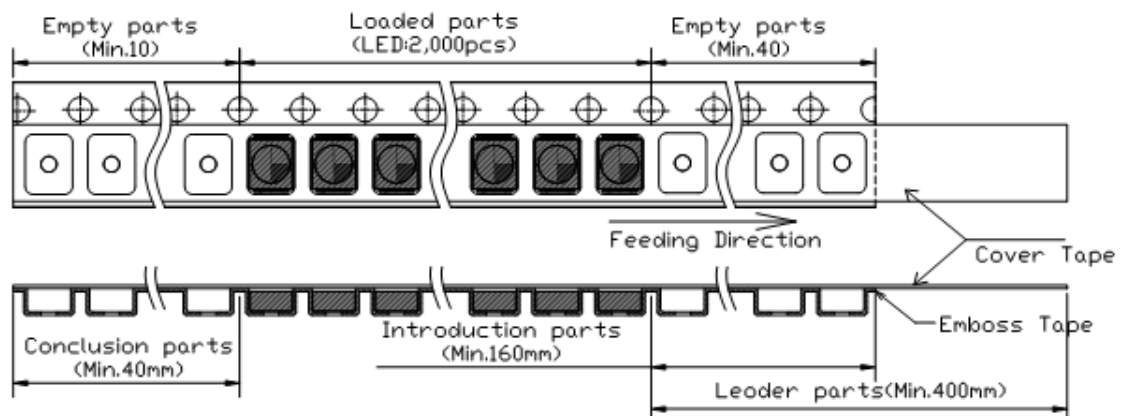
● Dimensions of Reel (Unit: mm)



● Dimensions of Tape (Unit: mm)



● Arrangement of Tape



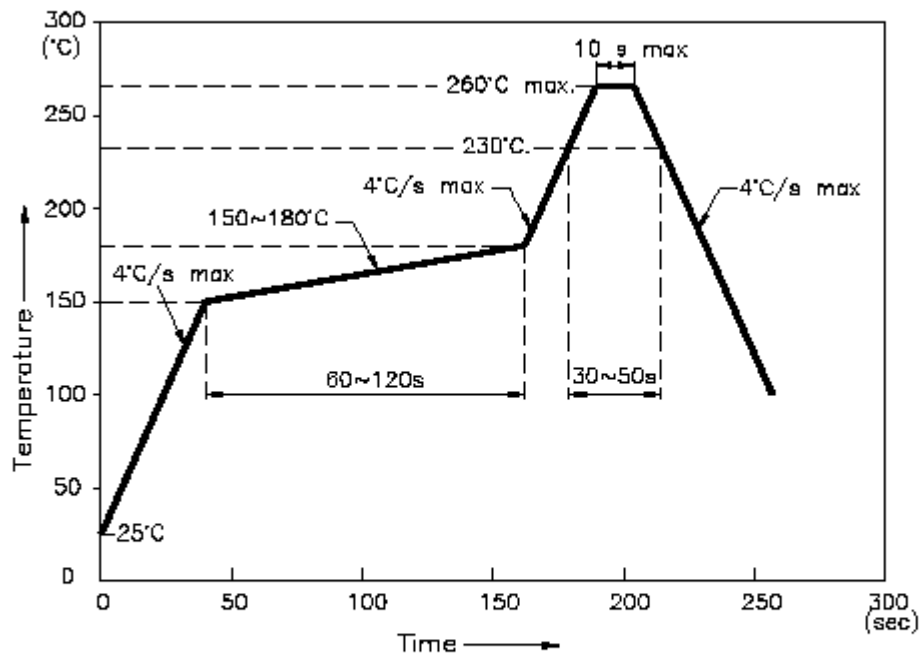
NOTES

1. Empty component pockets are sealed with top cover tape;
2. The maximum number of missing lamps is two;
3. The cathode is oriented towards the tape sprocket hole;
4. 2,000pcs/Reel



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Reflow Soldering Profile For Lead-free SMT Process.



NOTES:

1. We recommend the reflow temperature 245°C(+/-5°C). The maximum soldering temperature should be limited to 260°C.
2. Don't cause stress to the epoxy resin while it is exposed to high temperature.
3. Number of reflow process shall be 2 times or less.