

Reflective With Hermetic Components

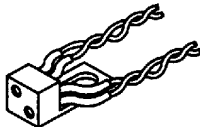
Assemblies

Honeywell offers the world's largest line of reflective assemblies built with hermetic components. HOA1160 uses components from the SE2450 IRED, SD2440 phototransistor, and SD2440 photodarlington families. HOA1180, HOA1404 and HOA2498 are based on SE1450 IRED, SD1440 phototransistor, and SD1410 photodarlington families. Device lead temperature should not exceed 260°C (0.062 inches from the case) during soldering.

ORDER AND SPECIFICATION GUIDE

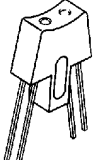
Package Style	Part Number Note 4	Sensor Type Photo-	Sensor Light Current min.	units	at I_F (mA)	and V_{CE} (V)	See Note
	HOA1160-1	-transistor	0.50	mA	30	5.0	1
	HOA1160-2	-transistor	2.00	mA	30	5.0	1
	HOA1160-3	-darlington	5.00	mA	30	5.0	1

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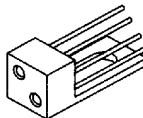
	HOA1180-1	-transistor	0.04	mA	30	5.0	2, 5
	HOA1180-2	-transistor	0.16	mA	30	5.0	2, 5
	HOA1180-3	-darlington	2.00	mA	30	5.0	2, 5

Note 5

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	HOA1404-1	-transistor	0.20	mA	30	5.0	3
	HOA1404-2	-transistor	0.80	mA	30	5.0	3
	HOA1404-3	-darlington	2.00	mA	30	5.0	3

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	HOA2498-1	-transistor	0.04	mA	30	5.0	2
	HOA2498-2	-transistor	0.16	mA	30	5.0	2
	HOA2498-3	-darlington	2.00	mA	30	5.0	2

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NOTES

1. Reflective surface: Kodak Neutral White test card (90% diffuse reflectance) placed 0.075 inch in front of assembly.
2. Reflective surface: Front-surface mirror placed 0.500 inch in front of assembly.
3. Reflective surface: Front-surface mirror placed 0.200 inch in front of assembly.
4. Dark current: identical to device I_{CEO} under same conditions. Phototransistors: $V_{CE} = 10V$, $<100nA$. Photodarlington: $V_{CE} = 10V$, $<250nA$. **Dark surface current:** function of surface in use; will **always** exceed I_{CEO} .
5. Wire color code:
 - Red - IRED anode
 - Black - IRED cathode
 - Black - Sensor emitter
 - Brown - Sensor collector for -1
 - Orange - Sensor collector for -2
 - Yellow - Sensor collector for -3