

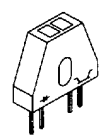
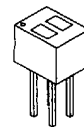
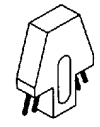


# Assemblies Reflective With Plastic Encapsulated Components

Honeywell has a complete line of reflective assemblies built with plastic-encapsulated components. HLC1395 is a component that functions like an assembly. HOA149, HOA708, HOA709, and HOA1405 use components from SEP8505 IRED, SDP8405 phototransistor, and SDP8105 photodarlington families. HOA1397 is based on SEP8507 IRED, SEP8407 phototransistor, and SDP8107 photodarlington families. (Note that SDP8107 is not a catalog item.)

## ORDER AND SPECIFICATION GUIDE

Package Style	Part Number Note 5	Sensor Type Photo-	Sensor Light Current min.	units	at $I_F$ (mA)	and $V_{CE}$ (V)	See Note
	HLC1395-1	-transistor	0.30	mA	10	5.0	1
	HLC1395-2	-transistor	0.60	mA	10	5.0	1
<b>Drawing 58</b> <b>Page 46</b>							
	HOA149-1	-transistor	25.00	$\mu$ A	40	5.0	7
<b>Drawing 59</b> <b>Page 46</b>							
	HOA708-1	-transistor	10.00	$\mu$ A	40	5.0	2
	HOA708-11	-transistor	10.00	$\mu$ A	40	5.0	2
	HOA709-1	-darlington	1.00	mA	40	5.0	2
	HOA709-11	-darlington	1.00	mA	40	5.0	2
<b>Drawing 60</b> <b>Page 46</b>							
	HOA1397-1	-transistor	0.20	mA	20	5.0	3
	HOA1397-2	-transistor	0.70	mA	20	5.0	3
	HOA1397-31	-darlington	2.00	mA	20	5.0	3
	HOA1397-32	-darlington	7.00	mA	20	5.0	3
<b>Drawing 61</b> <b>Page 46</b>							
	HOA1405-1	-transistor	0.20	mA	30	5.0	4
	HOA1405-2	-transistor	0.80	mA	30	5.0	4
<b>Drawing 62</b> <b>Page 46</b>							

### NOTES:

1. Reflective surface: Eastman Kodak neutral white test card (90% diffuse reflectance) placed 0.040 inch in front of assembly.
2. Reflective surface: Eastman Kodak neutral white test card (90% diffuse reflectance) placed 0.150 inch in front of assembly.
3. Reflective surface: Eastman Kodak neutral white test card (90% diffuse reflectance) placed 0.050 inch in front of assembly.
4. Reflective surface: Eastman Kodak neutral white test card (90% diffuse reflectance) placed 0.200 inch in front of assembly.
5. Dark current: identical to device  $I_{CEO}$  under same conditions. Phototransistors:  $V_{CE} = 10$  V,  $<100$  nA. Photodarlington:  $V_{CE} = 10$  V,  $<250$  nA. **Dark-surface current:** function of surface in use, but will **always** exceed  $I_{CEO}$ .
6. Components in HOA708-11 and HOA709-11 are covered with an IR transparent filter, which increases ambient light rejection.
7. Reflective surface: Front surface mirror placed 0.150" in front of assembly.