

INFRARED EMITTING DIODE--END LOOK

Package	Part No.	Chip		Lens Color	V _F (V)@I _F =50mA		E _e (mW/sr) @I _F =50mA		Viewing Angle 2θ 1/2	Drawing No.
		Material	Wavelength λ _p		Typ	Max	Min	Typ		
3 φ	BIR-BM1341	GaAlAs/GaAs	940	Water clear	1.25	1.50	13.81	33.00	30	L-106
	BIR-BM1341-A	GaAlAs/GaAs	940		1.25	1.50	13.81	33.00		
	BIR-BO1341	GaAlAs/GaAlAs	850		1.50	1.80	16.50	53.00		
	BIR-BO0341	GaAlAs/GaAlAs	850		1.50	1.80	16.50	45.00		
	BIR-BM1741	GaAlAs/GaAs	940	Blue	1.25	1.50	9.90	33.00	35	
	BIR-BM1741-A	GaAlAs/GaAs	940		1.25	1.50	9.90	33.00		
	BIR-BO0741	GaAlAs/GaAlAs	850	Transparent	1.50	1.80	16.50	65.50	30	
	BIR-BO1741	GaAlAs/GaAlAs	850		1.50	1.80	16.50	65.50		
	BIR-BM1341J	GaAlAs/GaAs	940	Water clear	1.25	1.50	6.00	18.00	50	L-107
	BIR-BO0341J	GaAlAs/GaAlAs	850		1.50	1.80	16.50	65.50	35	
	BIR-BO1341J	GaAlAs/GaAlAs	850		1.50	1.80	16.50	35.00		
	BIR-BM1341Q	GaAlAs/GaAs	940	Water clear	1.25	1.50	11.78	33.40	35	L-108
	BIR-BO0341Q	GaAlAs/GaAlAs	940		1.50	1.80	16.5	65.00		
	BIR-BO1341Q	GaAlAs/GaAlAs	850		1.50	1.80	16.50	65.00		
	5 φ	BIR-BM13J4G	GaAlAs/GaAs	940	Water Clear	1.25	1.50	16.50	55.00	20
BIR-BO13J4G		GaAlAs/GaAlAs	850	1.50		1.80	32.36	128.00		
BIR-BO03J4G		GaAlAs/GaAlAs	850	1.50		1.80	27.20	89.00		
BIR-BM17J4G		GaAlAs/GaAs	940	Blue Transparent	1.25	1.50	16.50	55.00	20	
BIR-BO17J4G		GaAlAs/GaAlAs	850		1.50	1.80	27.20	128.50		
BIR-BO07J4G		GaAlAs/GaAlAs	850		1.50	1.80	27.20	128.50		
BIR-BM13J4G-1		GaAlAs/GaAs	940	Water Clear	1.25	1.50	11.78	45.31	25	
BIR-BO03J4G-1		GaAlAs/GaAlAs	850		1.50	1.80	32.36	91.79		
BIR-BO13J4G-1		GaAlAs/GaAlAs	850		1.50	1.80	32.36	91.79		
BIR-BM13E4G-1		GaAlAs/GaAs	940	Water Clear	1.25	1.50	11.78	30.00	30	L-110
BIR-BO03E4G-1		GaAlAs/GaAlAs	850		1.50	1.80	16.50	50.00		
BIR-BO13E4G-1		GaAlAs/GaAlAs	850		1.50	1.80	23.20	60.00		
BIR-BM13E4G-2		GaAlAs/GaAs	940	Water Clear	1.25	1.50	11.78	30.00	40	
BIR-BO03E4G-2		GaAlAs/GaAlAs	850		1.50	1.80	16.50	65.00		
BIR-BO13E4G-2		GaAlAs/GaAlAs	850		1.50	1.80	16.50	48.00		
BIR-BM18E4G-2		GaAlAs/GaAs	940	Blue Transparent	1.25	1.50	11.78	30.00	40	
BIR-BO08E4G-2		GaAlAs/GaAlAs	850		1.50	1.80	23.12	65.50		
BIR-BO18E4G-2		GaAlAs/GaAlAs	850		1.50	1.80	19.42	55.40		
BIR-BM13V4V-2	GaAlAs/GaAs	940	Water Clear	1.25	1.50	6.00	17.00	60	L-111	
BIR-BO03V4V-2	GaAlAs/GaAlAs	850		1.50	1.80	11.78	32.00	50		
BIR-BO13V4V-2	GaAlAs/GaAlAs	850		1.50	1.80	11.78	30.00	60		

INFRARED EMITTING DIODE--END LOOK

L-106 BIR-Bxxxx1	L-107 BIR-Bxxxx1J
<p>Technical drawing of BIR-Bxxxx1 diode showing side and end views with dimensions: 0.81 (.032), 1.5 (.059) MAX, 3.0 (.118), 5.3 (.208), 23.4 (.921) MIN, 1.0 (.040) MIN, 2.54 (.100) NOM, 0.5 (.020) SQ. TYP, and 3.8 (.150) end view diameter.</p>	<p>Technical drawing of BIR-Bxxxx1J diode showing side and end views with dimensions: 3.0 (.118), 5.10 (.201), 1.5 (.059) MAX, 0.5 (.020) SQ. TYP, 23.4 (.921) MIN, 1.0 (0.4) MIN, 2.54 (.100) NOM, and 3.00 (.118) end view diameter.</p>
L-108 BIR-Bxxxx1Q	L-109 BIR-BxxxJ4G(-x)
<p>Technical drawing of BIR-Bxxxx1Q diode showing side and end views with dimensions: 3.10 (.122), 1.30 (.051), 4.80 (.189), 25.4 (1.00) MIN, 1.00 (.040) MIN, 2.54 (.100) NOM, 1.5 (.059) MAX, and 3.60 (.142) / 3.80 (.150) end view diameters.</p>	<p>Technical drawing of BIR-BxxxJ4G(-x) diode showing side and end views with dimensions: 5.0 (.197), 1.0 (.040), 8.62 (.339), 23.4 (.921) MIN, 1.0 (.040) MIN, 2.54 (.100) NOM, 1.5 (.059) MAX, 0.5 (.020) SQ. TYP, and 5.9 (.232) end view diameter.</p>
L-110 BIR-BxxxE4G-x	L-111 BIR-Bxxxx4V-2
<p>Technical drawing of BIR-BxxxE4G-x diode showing side and end views with dimensions: 5.0 (.197), 1.0 (.040), 8.62 (.339), 23.4 (.921) MIN, 1.0 (.040) MIN, 2.54 (.100) NOM, 1.5 (.059) MAX, 0.5 (.020) SQ. TYP, and 5.9 (.232) end view diameter.</p>	<p>Technical drawing of BIR-Bxxxx4V-2 diode showing side and end views with dimensions: $\phi 4.98 (1.96)$, 7.7 (.303), 1.0 (.040), 23.4 (.921) MIN, 1.0 (.040) MIN, 2.54 (.100) NOM, 1.5 (.059) MAX, $\phi 5 (.197)$, 0.5 (0.197) SQ TYP, and $\phi 5.9 (232)$ end view diameter.</p>

Notes: 1. All dimensions are in millimeters (inches).
 2. Tolerance is $\pm 0.25\text{mm}$ (.010")

INFRARED EMITTING DIODE--END & SIDE LOOK

Package	Part No.	Chip		Lens Color	$V_F(V)@I_F=50mA$		$E_e(mW/sr) @I_F=50mA$		Viewing Angle 2θ 1/2	Drawing No.
		Material	Wavelength λ_p		Typ	Max	Min	Typ		
5 ϕ	BIR-BM18V4V-2	GaAlAs/GaAs	940	Blue Transparent	1.25	1.50	4.29	15.00	20	L-112
	BIR-BO08V4V-2	GaAlAs/GaAlAs	850		1.50	1.80	16.50	46.83		
	BIR-BO18V4V-2	GaAlAs/GaAlAs	850		1.50	1.80	16.50	46.83		
	BIR-BM13K4Q	GaAlAs/GaAs	940	Water clear	1.25	1.50	4.29	12.00	45	L-113
	BIR-BO13K4Q-2	GaAlAs/GaAlAs	850		1.50	1.80	16.50	46.80		
	BIR-BO13K4Q	GaAlAs/GaAlAs	850		1.50	1.80	11.78	35.00		
	BIR-BM13J7M	GaAlAs/GaAs	940	Water clear	1.25	1.50	16.50	46.00	15	L-114
	BIR-BO03J7M	GaAlAs/GaAlAs	850		1.50	1.80	23.12	100.00		
	BIR-BO13J7M	GaAlAs/GaAlAs	850		1.50	1.80	27.20	128.00		
3 ϕ Flux	BIR-FO13F1	GaAlAs/GaAlAs	850	Water clear	1.50	1.80	6.00	12.18	80	L-115
	BIR-FO13F2	GaAlAs/GaAlAs	850	Water clear	1.50	1.80	8.41	17.06	60	L-116

SIDE LOOK INFRARED EMITTING DIODE

Package	Part No.	Chip		Lens Color	$V_F(V)@I_F=20mA$		$E_e(mW/cm^2) @I_F=4mA$		Viewing Angle 2θ 1/2	Drawing No.
		Material	Wavelength λ_p		Typ	Max	Min	Typ		
1.5x4.5x5.7 mm	BIR-NM13C1	GaAlAs/GaAs	940	Water Clear	1.20	1.50	0.40	0.65	45	L-119
	BIR-NM23C1	GaAlAs/GaAs	940		1.20	1.50	0.40	0.60		

<p>L-112 BIR-Bxxxx4V-2</p>	<p>L-113 BIR-Bxxxx4Q</p>
<p>L-114 BIR-Bxxxx7M</p>	<p>L-119 BIR-NMxxC1</p>

Notes: 1. All dimensions are in millimeters (inches).
 2. Tolerance is $\pm 0.25mm$ (.010")