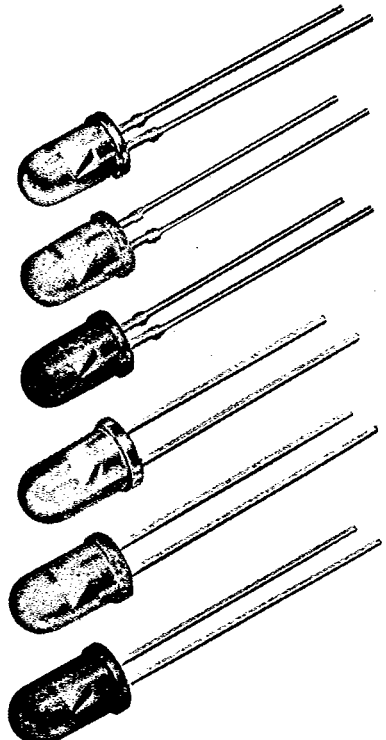
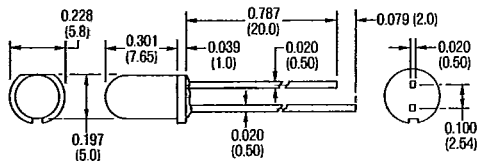


T-1³/₄ LED LAMPS

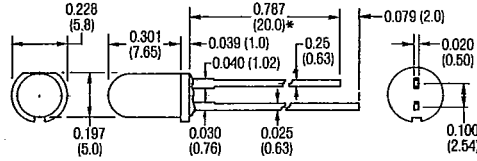
FEATURES	PART NUMBER	MATERIAL	LENS COLOR	VIEWING ANGLE (TYP.)	LUMINOUS INTENSITY (mcd)			ELEC. PARA. (Page 5)
					MIN.	TYP.	@ I _f (mA)	
T-1³/₄ STRAIGHT LEAD TYPES <ul style="list-style-type: none"> Excellent on/off contrast ratio. GaP red excellent at low current levels (Compatible with TTL, MOS and CMOS circuits). High brightness with wide viewing angle. Long life, solid state reliability. Uniform brightness. Mounting hardware available. 	ID5752	GaAsP/GaP	Red/Clear	50°	15.0	25.0	20	C
	ID5753	GaAsP/GaP	Red/Diff.	80°	8.0	14.0	20	C
	ID5059-R	GaP/GaP	Red/Diff.	80°	2.5	3.0	10	A
	ID5549-R	GaP/GaP	Red/Clear	50°	3.5	5.0	10	A
	ID5253	GaP/GaP	Green/Diff.	80°	8.0	16.0	20	E
	ID5252	GaP/GaP	Green/Clear	50°	10.0	35.0	20	E
	ID5353	GaAsP/GaP	Yellow/Diff.	80°	8.0	16.0	20	F
	ID5352	GaAsP/GaP	Yellow/Clear	50°	10.0	35.0	20	F
T-1³/₄ ULTRA-BRIGHT STRAIGHT LEAD TYPES <ul style="list-style-type: none"> Ultra-brightness in red, green and yellow. Excellent for backlighting. A quantum leap in brightness. High intensity light emission with wide viewing angles. 	ID5531-UR	GaAlAs	Red/Diff.	80°	15.0	50.0	20	B
	ID5501-UR	GaAlAs	Red/Clear	50°	40.0	100.0	20	B
	ID5531-UG	GaP/GaP	Green/Diff.	80°	10.0	30.0	20	E
	ID5501-UG	GaP/GaP	Green/Clear	50°	30.0	60.0	20	E
	ID5531-UY	GaAsP/GaP	Yellow/Diff.	80°	15.0	40.0	20	F
	ID5501-UY	GaAsP/GaP	Yellow/Clear	50°	30.0	60.0	20	F
T-1³/₄ WIRE-WRAPPABLE OFFSET LEAD TYPES <ul style="list-style-type: none"> High brightness at low current levels. Sturdy leads excellent for wire wrapping. Solid state reliability. 	ID5053-R	GaP/GaP	Red/Diff.	80°	0.5	1.5	10	A
	ID554-R	GaP/GaP	Red/Clear	50°	1.5	4.0	10	A
	ID5053-G	GaP/GaP	Green/Diff.	80°	1.0	5.0	10	E
	ID554-G	GaP/GaP	Green/Clear	50°	3.0	17.0	10	E
	ID5053-Y	GaAsP/GaP	Yellow/Diff.	80°	1.0	5.0	10	F
	ID554-Y	GaAsP/GaP	Yellow/Clear	50°	2.0	9.0	10	F



STRAIGHT LEAD TYPES

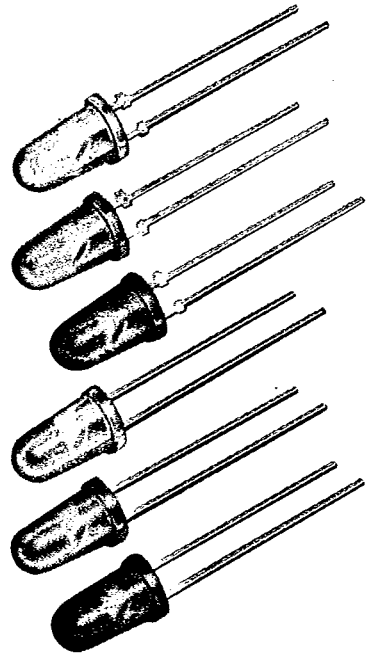


WIRE WRAPPABLE OFFSET LEAD TYPES

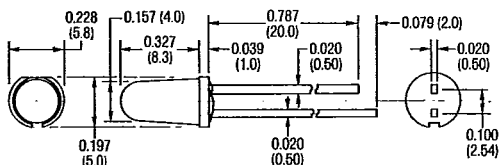


FEATURES	PART NUMBER	MATERIAL	LENS COLOR	VIEWING ANGLE (TYP.)	LUMINOUS INTENSITY (mcd)			ELEC. PARA. (Page 5)
					MIN.	TYP.	@ I _f (mA)	
TAPERED T-1³/₄ ULTRA-BRIGHT STRAIGHT LEAD TYPES <ul style="list-style-type: none"> Ultra intensity light emission in red, green and yellow. Excellent performance under ambient light conditions. Clear devices provide excellent point source. Solid state reliability. 	ID5269-UR	GaAlAs	Red/Diff.	30°	20	100	20	B
	ID5249-UR	GaAlAs	Red/Clear	10°	50	200	20	B
	ID5269-UG	GaP/GaP	Green/Diff.	30°	20	60	20	E
	ID5249-UG	GaP/GaP	Green/Clear	10°	60	120	20	E
	ID5269-UY	GaAsP/GaP	Yellow/Diff.	30°	20	60	20	F
	ID5249-UY	GaAsP/GaP	Yellow/Clear	10°	60	120	20	F
TAPERED T-1³/₄ WIRE-WRAPPABLE OFFSET LEAD TYPES <ul style="list-style-type: none"> Popular T-1³/₄ tapered lens. Two choices of red for different current levels. Sturdy wire-wrappable leads. Solid state reliability. 	ID526-R	GaP/GaP	Red/Diff.	30°	1.0	2.5	10	A
	ID5267-R	GaAsP/GaP	Red/Diff.	20°	2.0	5.0	20	C
	ID5247-R	GaAsP/GaP	Red/Clear	20°	4.0	12.0	20	C
	ID526-G	GaP/GaP	Green/Diff.	30°	8.0	30.0	20	E
	ID524-G	GaP/GaP	Green/Clear	20°	20.0	60.0	20	E
	ID526-Y	GaAsP/GaP	Yellow/Diff.	30°	8.0	30.0	20	F
ID524-Y	GaAsP/GaP	Yellow/Clear	20°	20.0	60.0	20	F	

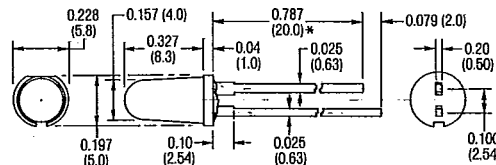
TAPERED T-1³/₄ LED LAMPS



STRAIGHT LEAD TYPES

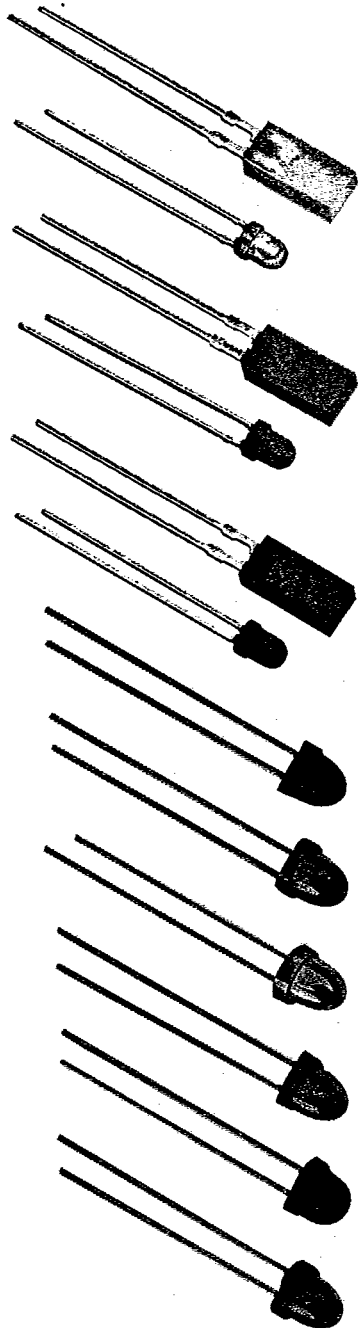


WIRE WRAPPABLE OFFSET LEAD TYPES



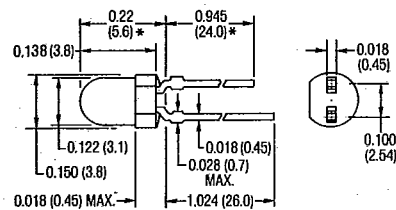
T-41-23

RECTANGULAR LED LAMPS

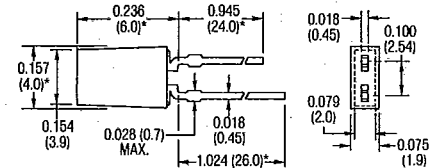


FEATURES	PART NUMBER	MATERIAL	LENS COLOR	VIEWING ANGLE (TYP.)	LUMINOUS INTENSITY (mcd)			ELEC. PARA. (Page 5)
					MIN.	TYP.	@ I _f (mA)	
T-1 SIZE ULTRA-BRIGHT TYPES • Ultra-brightness in T-1 package. • Capable of pulse operation. • Excellent on/off contrast ratio. • Solid state reliability.	ID124-UR	GaAlAs	Red/Diff.	70°	20	40	20	B
	ID124-UG	GaP/GaP	Green/Diff.	70°	10	20	20	E
	ID124-UY	GaAsP/GaP	Yellow/Diff.	70°	10	30	20	F
T-1 SIZE STANDARD TYPES	ID124-R	GaP/GaP	Red/Diff.	75°	1.6	2.0	10	A
	ID124-G	GaP/GaP	Green/Diff.	75°	1.2	3.0	20	E
	ID124-Y	GaAsP/GaP	Yellow/Diff.	75°	1.2	3.0	20	F
RECTANGULAR TYPES • Solid state reliability. • Excellent for use in front panel displays. • Stackable.	ID269-R	GaP/GaP	Red/Diff.	—	0.7	1.5	20	A
	ID369-G	GaP/GaP	Green/Diff.	—	0.5	1.2	20	E
	ID569-Y	GaAsP/GaP	Yellow/Diff.	—	0.5	1.2	20	F
T-1¼ LOW PROFILE LED LAMPS	ID50152	GaAsP/GaAs	Red/Clear	45°	7	10	20	D
	ID52152	GaP/GaP	Green/Clear	45°	8	15	20	E
	ID53152	GaAsP/GaP	Yellow/Clear	45°	6	12	10	F
	ID57152	GaAsP/GaP	Orange/Clear	45°	4	8	10	C
	ID50154	GaAsP/GaAs	Red/Diff.	50°	2	3.5	10	D
	ID52154	GaP/GaP	Green/Diff.	50°	8	15	20	E
	ID53154	GaAsP/GaP	Yellow/Diff.	50°	6	12	10	F
	ID57154	GaAsP/GaP	Orange/Diff.	50°	2	4	10	C
	ID56152	GaAsP/GaP	Red/Clear	45°	12	18	10	C
T-1¼ FLANGELESS LED LAMPS	ID5714	GaAsP/GaAs	Red/Clear	24°	0.6	2.3	10	D
	ID5744	GaAsP/GaP	Red/Clear	24°	1.0	3.5	10	C
	ID5724	GaP/GaP	Green/Clear	24°	1.0	3.5	10	E
	ID5734	GaAsP/GaP	Yellow/Clear	24°	0.7	2.1	10	F
	ID5754	GaAsP/GaP	Orange/Clear	24°	1.0	3.5	10	C
	ID5711	GaAsP/GaAs	Red/Diff.	30°	0.6	1.3	10	D
	ID5741	GaAsP/GaP	Red/Diff.	30°	1.0	2.0	10	C
	ID5721	GaP/GaP	Green/Diff.	30°	1.0	2.0	10	E
	ID5731	GaAsP/GaP	Yellow/Diff.	30°	0.7	1.2	10	F
	ID5751	GaAsP/GaP	Orange/Diff.	30°	1.0	2.0	10	C

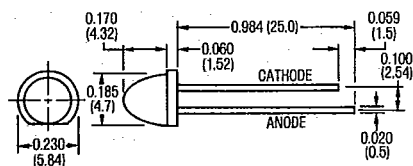
T-1 SIZE TYPES



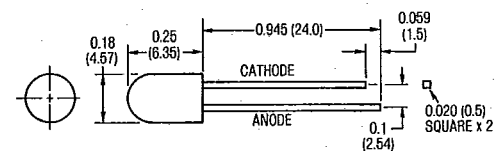
RECTANGULAR TYPES



T-1¼ LOW PROFILE LED LAMPS



T-1¼ FLANGELESS LED LAMPS

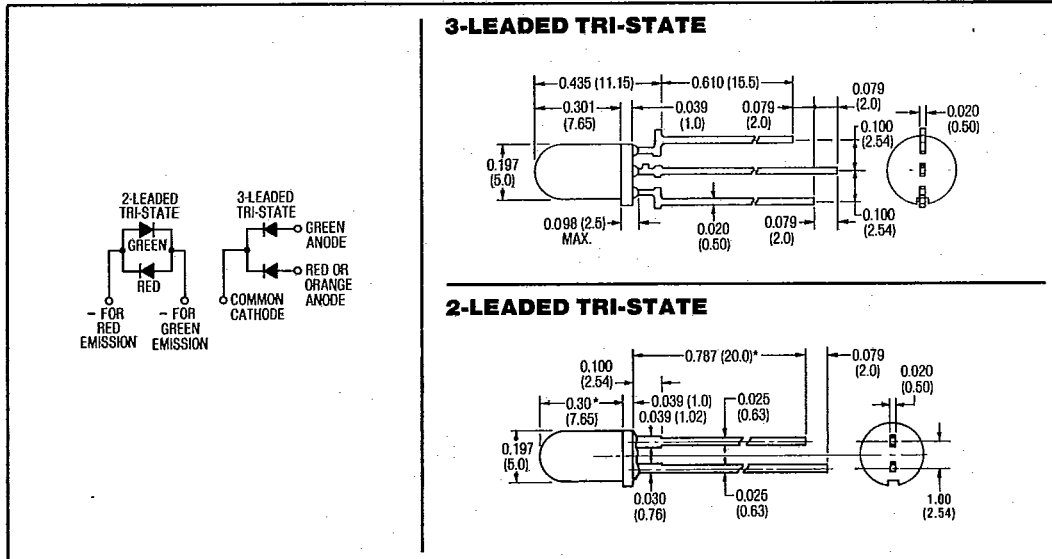
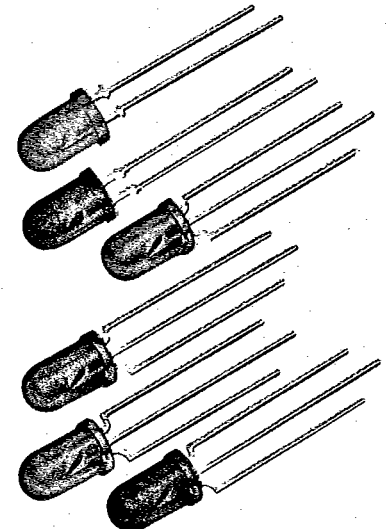


SPECIALTY LED LAMPS

T-41-25

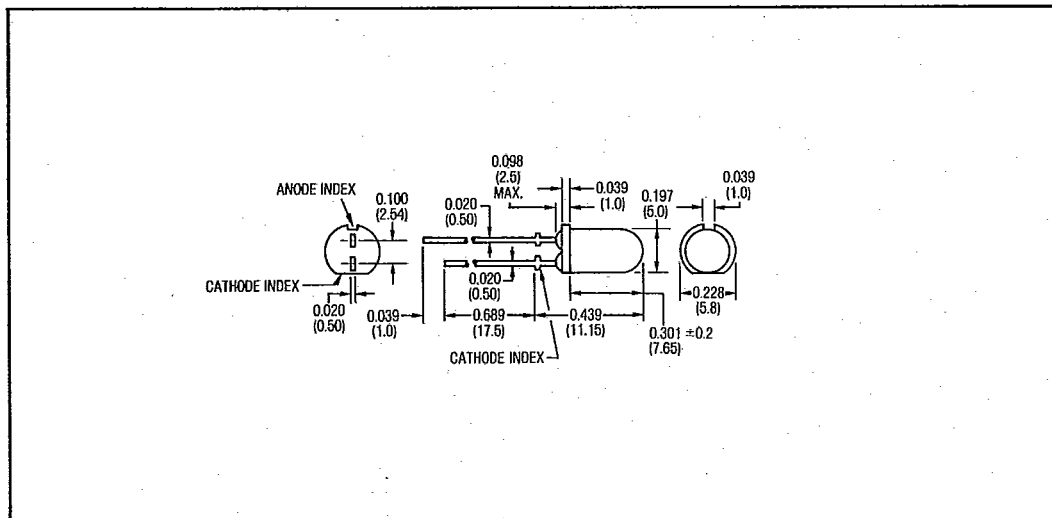
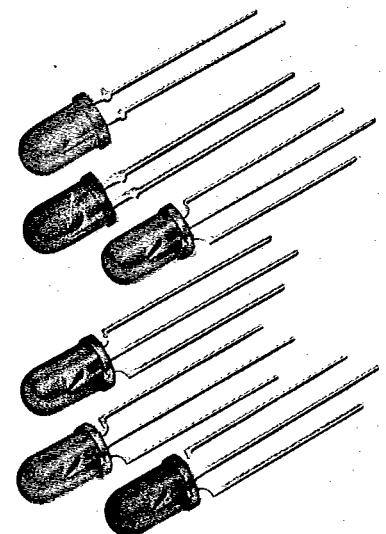
**TRI-STATE
T-1 $\frac{3}{4}$ LED LAMPS**

FEATURES	PART NUMBER	MATERIAL	LENS COLOR	VIEWING ANGLE (TYP.)	LUMINOUS INTENSITY (mcd)			ELEC. PARA. (Page 5)
					MIN.	TYP.	@ I _f (mA)	
TRI-STATE T-1$\frac{3}{4}$ LED LAMPS • Available in 3- and 2-leaded packages. • Uniform color brightness at same current levels. • Reduced space requirements. • In 3-leaded package, choice of red and green or orange and green.	3-LEADED RED/GREEN TYPES							
	ID116-RG	GaAsP/GaP	Red/Diff.	80°	3.5	7	15	C
		GaP/GaP	Green/Diff.	80°	2.5	5	15	E
	3-LEADED ORANGE/GREEN TYPES							
	ID116-OG	GaAsP/GaP	Orange/Diff.	80°	2.5	5	15	C
		GaP/GaP	Green/Diff.	80°	2.5	5	15	E
2-LEADED RED/GREEN TYPES								
ID5491-RG	GaP/GaP	Red/Diff.	30°	0.6	1.8	20	A	
	GaP/GaP	Green/Diff.	30°	1.0	2.0	20	E	



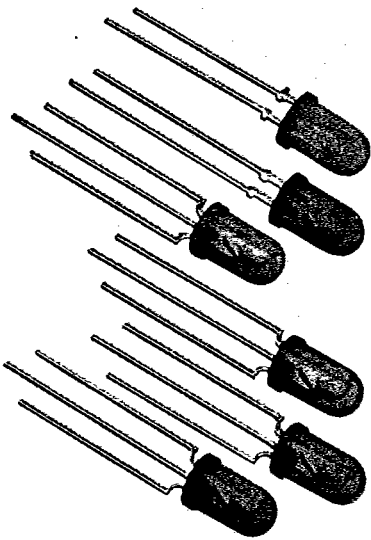
FEATURES	PART NUMBER	MATERIAL	LENS COLOR	VIEWING ANGLE (TYP.)	LUMINOUS INTENSITY (mcd)			ELEC. PARA. (Page 5)
					MIN.	TYP.	@ I _f (mA)	
5VDC INTEGRATED RESISTOR T-1$\frac{3}{4}$ LED LAMPS • Choice of red, green and yellow in popular T-1 $\frac{3}{4}$ package. • Available in diffused or clear packages. • Self-contained current limiting resistor. • TTL compatible. • Solid state reliability.	ID4860-5VR	GaP/GaP	Red/Clear	50°	0.8	3.5	5	A
	ID4850-5VR	GaP/GaP	Red/Diff.	80°	0.5	1.5	5	A
	ID4860-5VG	GaP/GaP	Green/Clear	50°	3	17	5	E
	ID4850-5VG	GaP/GaP	Green/Diff.	80°	0.8	5	5	E
	ID4860-5VY	GaAsP/GaP	Yellow/Clear	50°	1	9	5	F
	ID4850-5VY	GaAsP/GaP	Yellow/Diff.	80°	0.8	5	5	F

**5VDC
INTEGRATED
RESISTOR
T-1 $\frac{3}{4}$ LED LAMPS**

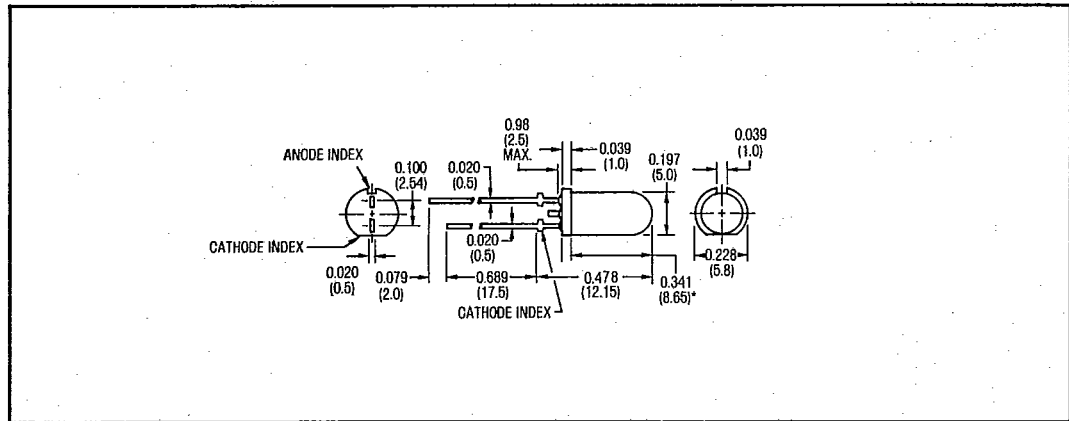


SPECIALTY LED LAMPS

2-CHIP T-1³/₄ LED TYPES

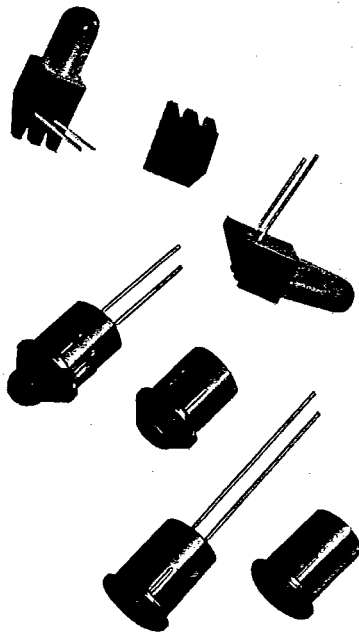


FEATURES	PART NUMBER	MATERIAL	LENS COLOR	VIEWING ANGLE (TYP.)	LUMINOUS INTENSITY (mcd)			ELEC. PARA. (Page 5)
					MIN.	TYP.	@ If (mA)	
2-CHIP T-1³/₄ LED TYPES • 2-chip series connection. • Transparent lensing available in red, orange, yellow and green. • Provides excellent on/off contrast ratio. • Superior to standard LED's for backlighting.	ID255-R	GaAsP/GaP	Red/Clear	50°	3	20	20	C
	ID255-G	GaP/GaP	Green/Clear	50°	3	20	20	E
	ID255-Y	GaAsP/GaP	Yellow/Clear	50°	3	20	20	F
	ID255-O	GaAsP/GaP	Orange/Clear	50°	3	20	20	C



MOUNTING HARDWARE

HARDWARE



LED MOUNTING HARDWARE

IDM-SR100 MOUNTING

IDM-200 T-1³/₄ MOUNTING RING

IDM-MF LED MOUNTING

IDM-23 LED MOUNTING HOUSING

IDM-MD LED MOUNTING

IDM-56 LED MOUNTING HOUSING

IDM-21F

IDM-21D

LED SELECTOR GUIDE

TABLE A — GaP Material (Red)

Absolute Maximum Ratings (Ta=25°C)

DESCRIPTION	SYMBOL	RATINGS	UNIT
Forward Current	I_F	20.0	mA
Reverse Voltage	V_R	4.0	V
Power Dissipation	P_D	90.0	mW
Operating Temperature	T_{opr}	-20 to +75	°C
Storage Temperature	T_{stg}	-30 to +100	°C

Electrical and Optical Characteristics (Ta=25°C)

DESCRIPTION	SYMBOL	CONDITION	TYP.	MAX.	UNIT
Forward Voltage	V_F	$I_F = 20mA$	2.1	2.8	V
Reverse Current	I_R	$V_R = 4V$		5.0	μA
Peak Wavelength	λ_p	$I_F = 15mA$	700		nm
Spectral Line Half Width	$\Delta\lambda$	$I_F = 15mA$	100		nm

TABLE B — GaAlAs Material (Red)

Absolute Maximum Ratings (Ta = 25°C)

DESCRIPTION	SYMBOL	RATINGS	UNIT
Forward Current	I_F	20	mA
Reverse Voltage	V_R	4	V
Power Dissipation	P_D	55	mW
Operating Temperature	T_{opr}	-20 to +75	°C
Storage Temperature	T_{stg}	-30 to +100	°C

Electrical and Optical Characteristics (Ta = 25°C)

DESCRIPTION	SYMBOL	CONDITION	TYP.	MAX.	UNIT
Forward Voltage	V_F	$I_F = 20mA$	1.75	2.2	V
Reverse Current	I_R	$V_R = 4V$		100	μA
Peak Wavelength	λ_p	$I_F = 10mA$	660		nm
Spectral Line Half Width	$\Delta\lambda$	$I_F = 10mA$	25		nm

TABLE C — GaAsP/GaP Material (Red/Orange)

Absolute Maximum Ratings (Ta = 25°C)

DESCRIPTION	SYMBOL	RATINGS	UNIT
Forward Current	I_F	25.0	mA
Reverse Voltage	V_R	4.0	V
Power Dissipation	P_D	70.0	mW
Operating Temperature	T_{opr}	-20 to +75	°C
Storage Temperature	T_{stg}	-30 to +100	°C

Electrical and Optical Characteristics (Ta = 25°C)

DESCRIPTION	SYMBOL	CONDITION	TYP.	MAX.	UNIT
Forward Voltage	V_F	$I_F = 20mA$	2.1	2.8	V
Reverse Current	I_R	$V_R = 4V$		100	μA
Peak Wavelength	λ_p	$I_F = 20mA$	635		nm
Spectral Line Half Width	$\Delta\lambda$	$I_F = 20mA$	40		nm

TABLE D — GaAsP/GaAs Material (Red)

Absolute Maximum Ratings (Ta = 25°C)

DESCRIPTION	SYMBOL	RATINGS	UNIT
Forward Current	I_F	50	mA
Reverse Voltage	V_R	5.0	V
Power Dissipation	P_D	100	mW
Operating Temperature	T_{opr}	-20 to +75	°C
Storage Temperature	T_{stg}	-30 to +100	°C

Electrical and Optical Characteristics (Ta = 25°C)

DESCRIPTION	SYMBOL	CONDITION	TYP.	MAX.	UNIT
Forward Voltage	V_F	$I_F = 20mA$	1.6	2.0	V
Reverse Current	I_R	$V_R = 5.0V$		10	μA
Peak Wavelength	λ_p	$I_F = 20mA$	655		nm
Spectral Line Half Width	$\Delta\lambda$	$I_F = 20mA$	40		nm

TABLE E — GaP Material (Green)

Absolute Maximum Ratings (Ta = 25°C)

DESCRIPTION	SYMBOL	RATINGS	UNIT
Forward Current	I_F	25	mA
Reverse Voltage	V_R	4	V
Power Dissipation	P_D	70.0	mW
Operating Temperature	T_{opr}	-20 to +75	°C
Storage Temperature	T_{stg}	-30 to +100	°C

Electrical and Optical Characteristics (Ta = 25°C)

DESCRIPTION	SYMBOL	CONDITION	TYP.	MAX.	UNIT
Forward Voltage	V_F	$I_F = 20mA$	2.1	2.8	V
Reverse Current	I_R	$V_R = 4V$		5.0	μA
Peak Wavelength	λ_p	$I_F = 15mA$	565		nm
Spectral Line Half Width	$\Delta\lambda$	$I_F = 15mA$	25		nm

TABLE F — GaAsP Material (Yellow)

Absolute Maximum Ratings (Ta = 25°C)

DESCRIPTION	SYMBOL	RATINGS	UNIT
Forward Current	I_F	25	mA
Reverse Voltage	V_R	4	V
Power Dissipation	P_D	70	mW
Operating Temperature	T_{opr}	-20 to +75	°C
Storage Temperature	T_{stg}	-30 to +100	°C

Electrical and Optical Characteristics (Ta = 25°C)

DESCRIPTION	SYMBOL	CONDITION	TYP.	MAX.	UNIT
Forward Voltage	V_F	$I_F = 20mA$	2.1	2.8	V
Reverse Current	I_R	$V_R = 4V$		100	μA
Peak Wavelength	λ_p	$I_F = 15mA$	585		nm
Spectral Line Half Width	$\Delta\lambda$	$I_F = 15mA$	32		nm