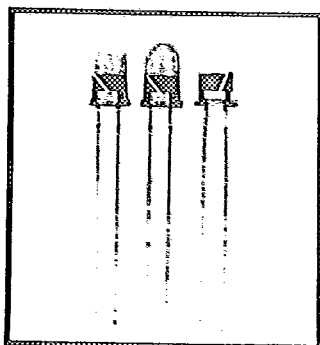


MODEL 200 (T-1 $\frac{3}{4}$) LEDs

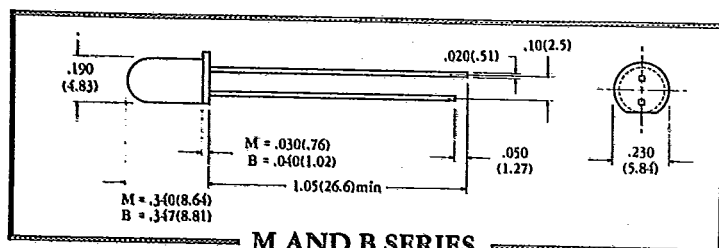
FEATURES

T-41-21

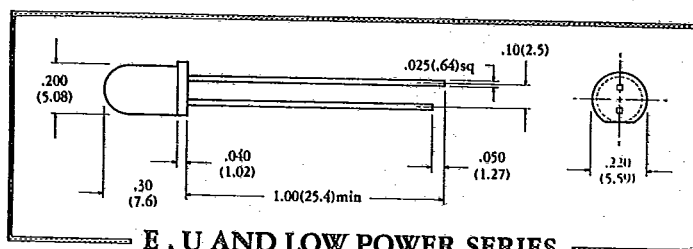


- Colors: Red, Green, Amber, Yellow
- Wide-Angle Illuminator, Bi-Color, Tri-Color, Integrated Resistor: 5 & 12 Volt, Low Power
- Encapsulations: Diffused Tinted, Non-Diffused Tinted, Non-Diffused Water Clear

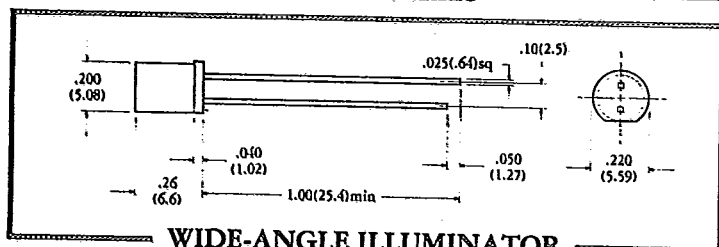
MECHANICAL DATA



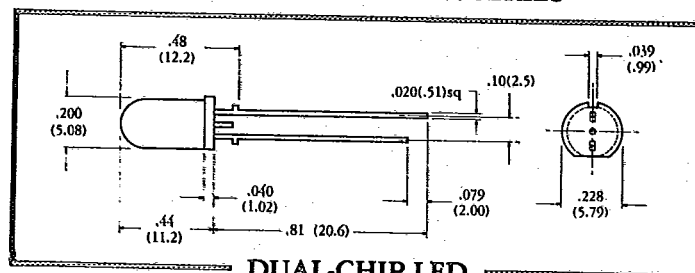
M AND B SERIES



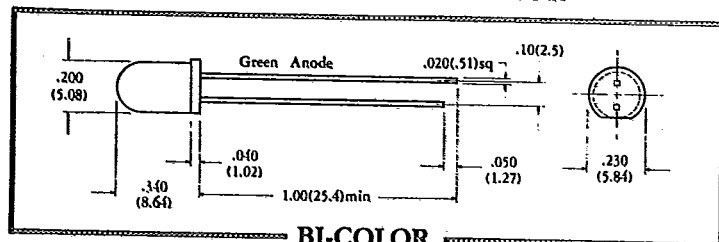
E, U AND LOW POWER SERIES



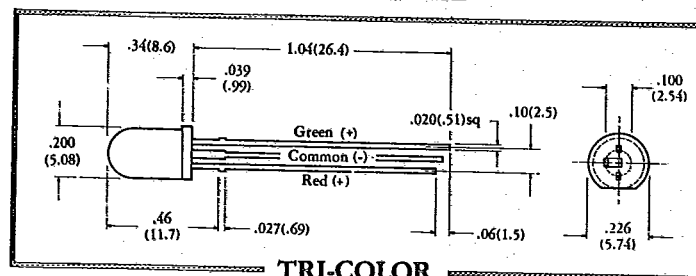
WIDE-ANGLE ILLUMINATOR



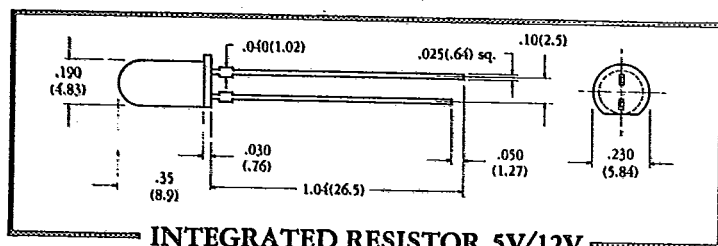
DUAL-CHIP LED



BI-COLOR



TRI-COLOR



INTEGRATED RESISTOR 5V/12V

Flat on flange denotes cathode

All dimensions are in inches (mm)
Tolerances: .xx"(.x) $\pm$.025"(.63), .xxx"(.xx) $\pm$.010"(.25)
Specifications subject to change without notice.
TOLERANCES

ABSOLUTE MAXIMUM RATINGS

PARAMETERS (TA=25°C)	SERIES		M	B	E	U	LOW POWER	WIDE- ANGLE	DUAL- CHIP	BI-COLOR	TRI- COLOR	INT. R 5V/12V
POWER DISSIPATION (mW)			120	120	120	120	24	120	160	135	150	30/12
DERATING FACTORS (mW)/°C			1.6	1.8*	1.6	1.6	■	1.6	■	1.6	■	■
MAXIMUM CONTINUOUS CURRENT (mA)			35	30	40	40*	7.5	55	30	30	30	10/13
PEAK FORWARD CURRENT 5% DUTY CYCLE (mA)			60	60	100	100	25	100	90	90	60	15/20
OPERATING & STORAGE TEMPERATURE (°C)			-55/+100	-55/+100	-30/+100	-30/+100	-55/+100	-30/+100	-20/+75	-55/+100	-55/+100	-40/+85

LED Soldering Temperature 1/16" Below Package Base For 5 Sec. = 260°C

*Red = 55 ★ Amber 1.6 Derate from 25°C ambient

■ Contact Factory

MODEL 200 (T-1 $\frac{3}{4}$) LEDsDATA
DISPLAY
PRODUCTS

ELECTRO-OPTICAL DATA

T-41-21

SERIES	COLOR	COLOR CODE/LUMINOUS INTENSITY I_v (mcd) at 25° C/20mA			PK WAVELENGTH λ (nm)	FWD VOLTAGE V_f Typ/Max (V)	CAPACITANCE C (pf)
		Diffused Tinted	Non-Diffused Tinted	Water Clear			
M <i>Viewing Angle 28°</i>	Red	MR/9	MCR/40		635	2.0/3.0	45
	Green	MG/14	MCG/60		565	2.2/3.0	20
	Amber	MA/8	MCA/45		585	2.0/3.0	45
		75°	28°				
B <i>Viewing Angle 28°</i>	Red	BR/18	BCR/75		635	2.1/3.0	16
	Green	BG/13	BCG/50		565	2.2/3.0	18
	Amber	BA/20	BCA/75		583	2.3/3.0	18
		75°	35°				
E <i>Viewing Angle 28°</i>	Red	ER/30	ECR/200	EWR/200	660	1.7/2.2	50
	Green	EG/12	ECG/80	EWG/80	555	2.1/2.8	50
	Amber	EA/24	ECA/90	EWA/90	605	2.1/2.8	50
	Yellow	EY/45	ECY/160	EWY/160	570	2.1/2.8	50
		50°	30°	30°			40
U¹ <i>Viewing Angle 28°</i>	Red	UR/120	UCR/400	UWR/500	660	1.8/2.4	50
	Green	UG/40	UCG/200	UWG/200	555	2.3/3.0	50
	Amber	UA/80	UCA/200	UWA/200	605	2.3/3.0	50
	Yellow	UY/100	UCY/350	UWY/350	570	2.3/3.0	40
		50°	30°	30°			
Low Power² <i>Viewing Angle 28°</i>	Red	H-RLP/2			635	1.8/2.2	4
	Green	H-GLP/2			565	1.8/2.2	18
	Amber	H-ALP/2			583	1.9/2.7	4
		50°					
Wide-Angle Illuminator <i>Viewing Angle 28°</i>	Red		FUCR/25	FUWR/25	660	1.7/2.2	50
	Green		FUCG/15	FUWG/15	555	2.1/2.8	50
	Amber		FUCA/15	FUWA/15	605	2.1/2.8	50
	Yellow		FUCY/25	FUWY/25	570	2.1/2.8	50
			180°	180°			40
Dual-Chip LED <i>Viewing Angle 28°</i>	Red		R-2/20		635	4.2/5.4	
	Green		G-2/25		565	4.2/5.4	
	Amber		A-2/20		585	4.2/5.4	
	Orange		O-2/20		610	4.2/5.4	
			50°				
Bi-Color³ <i>Viewing Angle 28°</i>	Red	LRG/21			660	1.8/2.4	30
	Green	LRG/17			565	2.2/3.0	30
		80°					
Tri-Color³ <i>Viewing Angle 28°</i>	Red	RAG/6			630	2.0/3.0	50
	Green	RAG/6			565	2.0/3.0	50
	Amber	RAG/6				2.0/3.0	50
		60°					
Integrated Resistor-5V⁴ <i>Viewing Angle 28°</i>	Red	BR5V/4			635	5/7.5	
	Green	BG5V/4			565	5/7.5	
	Amber	BA5V/4			583	5/7.5	
		65°					
Integrated Resistor-12V⁵ <i>Viewing Angle 28°</i>	Red	BR12V/4			635	12/15	
	Green	BG12V/4			565	12/15	
	Amber	BA12V/4			583	12/15	
		65°					

¹Forward Current Red = 50mA Others = 40mA²Forward Current = 2mA³Encapsulation: Milky Diffused⁴Forward Current Green = 12mA Others = 10mA⁵Forward Current = 13mAReverse Breakdown Voltage V_R (IR = 100 μ A) = 5Vdc Except E & U Series V_R = 4 Vdc

Information Regarding Electro-Optical Curves Can Be Found On Pages 8 & 9

ORDERING INFORMATION

200 — MCR

MODEL NUMBER

COLOR CODE

Refer to Electro-Optical Table Above