ELECTRO-OPTICAL CHARACTERISTICS (T_A=25°C)
HIGH EFFICIENCY RED

PARAMETER		SYMBOL	HLMP -2300	-2350	-2655	-2670	-2685	UNIT	TEST CONDITIONS
Luminous Intensity	min.	I_V	6.0	13	13	13	22	mcd	I_F=20 mA
	typ.		23	45	43	45	80	mcd	I_F=20 mA
	typ.		30	50	50	50	100	mcd	I_F=60 mA pK, 1:3 D.F.
Forward voltage	max.	V_F	2.6	2.6	2.6	2.6	2.6	V	I_F=20 mA
	typ.		2.0	2.0	2.0	2.0	2.0		
Peak wavelength	typ.	λ_p	630	630	630	630	630	nm	
Dominant wavelength	typ.	λ_d	626	626	626	626	626	nm	
Capacitance	typ.	C	45	45	45	45	45	pF	V_F=0, f=1 MHz
Reverse voltage	min.	V_R	6	6	6	6	6	V	I_R=100 μA
Thermal resistance	typ.	θ_{JL}	150	150	150	150	150	°C/W/ LED chip	

ELECTRO-OPTICAL CHARACTERISTICS (T_A=25°C)
YELLOW

PARAMETER		SYMBOL	HLMP -2400	-2450	-2755	-2770	-2785	UNIT	TEST CONDITIONS
Luminous Intensity	min.	I_V	6	13	13	13	26	mcd	I_F=20 mA
	typ.		20	38	35	35	70	mcd	I_F=20 mA
	typ.		33	60	60	60	115	mcd	I_F=60 mA pK, 1:3 D.F.
Forward voltage	max.	V_F	2.6	2.6	2.6	2.6	2.6	V	I_F=20 mA
	typ.		2.1	2.1	2.1	2.1	2.1		
Peak wavelength	typ.	λ_p	585	585	585	585	585	nm	
Dominant wavelength	typ.	λ_d	588	588	588	588	588	nm	
Capacitance	typ.	C	35	35	35	35	35	pF	V_F=0, f=1 MHz
Reverse voltage	min.	V_R	6	6	6	6	6	V	I_R=100 μA
Thermal resistance	typ.	θ_{JL}	150	150	150	150	150	°C/W/ LED chip	

ELECTRO-OPTICAL CHARACTERISTICS (T_A=25°C)
HIGH EFFICIENCY GREEN

PARAMETER		SYMBOL	HLMP -2500	-2550	-2855	-2870	-2885	UNIT	TEST CONDITIONS
Luminous Intensity	min.	I_V	5	11	11	11	22	mcd	I_F=20 mA
	typ.		25	50	50	50	100	mcd	I_F=20 mA
	typ.		38	75	75	75	150	mcd	I_F=60 mA pK, 1:3 D.F.
Forward voltage	max.	V_F	2.6	2.6	2.6	2.6	2.6	V	I_F=20 mA
	typ.		2.2	2.2	2.2	2.2	2.2		
Peak wavelength	typ.	λ_p	565	565	565	565	565	nm	
Dominant wavelength	typ.	λ_d	567	567	567	567	567	nm	
Capacitance	typ.	C	40	40	40	40	40	pF	V_F=0, f=1 MHz
Reverse voltage	min.	V_R	6	6	6	6	6	V	I_R=100 μA
Thermal resistance	typ.	θ_{JL}	150	150	150	150	150	°C/W/ LED chip	

TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES

(25°C Free Air Temperature Unless Otherwise Specified)

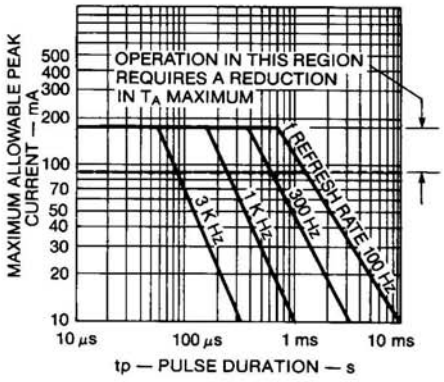


Fig. 1. Maximum Tolerable Peak Current per LED Chip vs. Pulse Duration for HLMP-23X0/-26XX/-25X0/-28XX

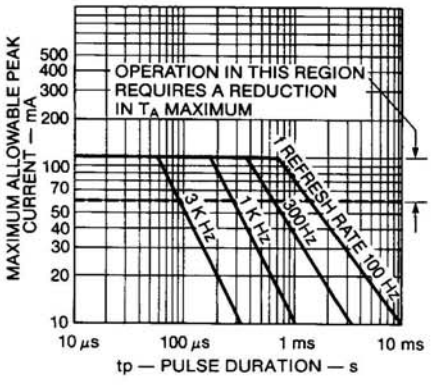


Fig. 2. Maximum Tolerable Peak Current per LED Chip vs.Pulse Duration for HLMP-24X0/-27XX Devices

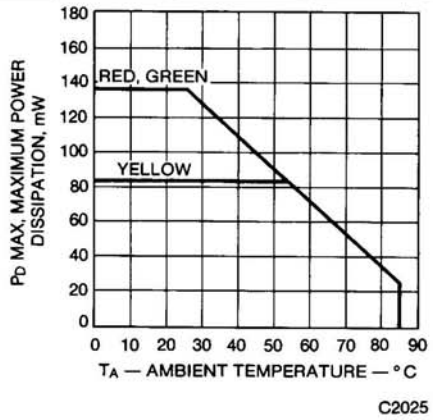


Fig. 3. Maximum Power Dissipation per LED vs. Ambient Temperature

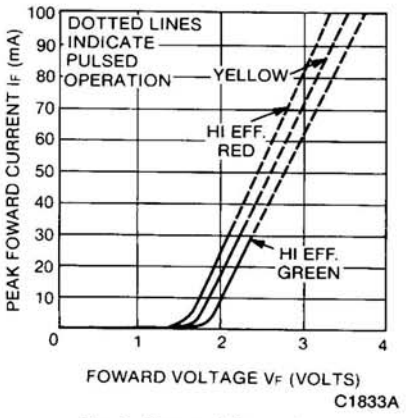


Fig. 4. Forward Current vs. Forward Voltage

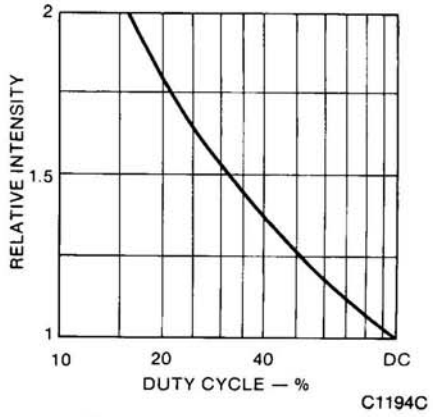


Fig. 5. Luminous Intensity vs. Duty Cycle

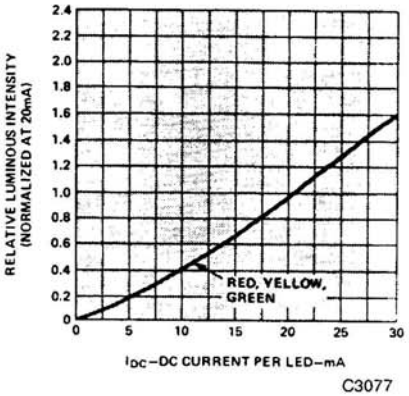


Fig. 6. Luminous Intensity vs. Forward Current

TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES
(25°C Free Air Temperature Unless Otherwise Specified) (Cont'd)

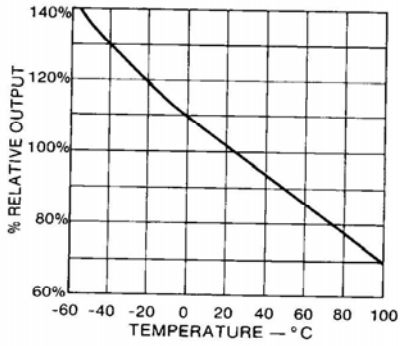
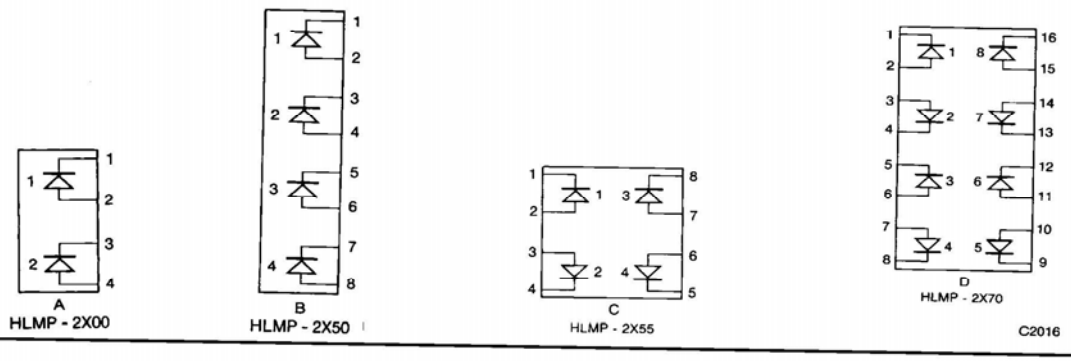


Fig. 7. Output vs. Temperature

PIN CONNECTIONS TO ELECTRICAL SCHEMATIC

PIN	ELECTRICAL CONNECTION			
	HLMP-2X00	HLMP-2X50	HLMP-2X55	HLMP-2X70/-2X85
1	1 Cathode	1 Cathode	1 Cathode	1 Cathode
2	1 Anode	1 Anode	1 Anode	1 Anode
3	2 Cathode	2 Cathode	2 Anode	2 Anode
4	2 Anode	2 Anode	2 Cathode	2 Cathode
5		3 Cathode	3 Cathode	3 Cathode
6		3 Anode	3 Anode	3 Anode
7		4 Cathode	4 Anode	4 Anode
8		4 Anode	4 Cathode	4 Cathode
9				5 Cathode
10				5 Anode
11				6 Anode
12				6 Cathode
13				7 Cathode
14				7 Anode
15				8 Anode
16				8 Cathode

ELECTRICAL SCHEMATIC



LED LIGHT BARS

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2. A critical component in any component of a life support device or system whose failure to perform can be or (b) reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.