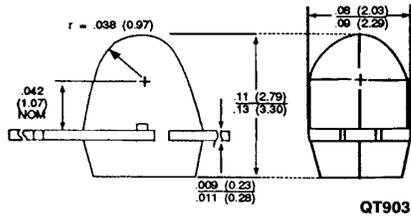
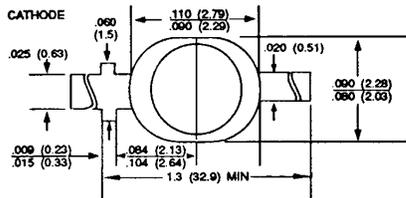


**RED MR5000/5010/5020
YELLOW MR5310
GREEN MR5410**

PACKAGE DIMENSIONS



- NOTES:
1. ALL DIMENSIONS IN INCHES (mm)
2. TOLERANCES ± .010 INCH UNLESS SPECIFIED

DESCRIPTION

These T-3/4 LED lamps contain an integral resistor which is in series with the emitter chip. This construction allows for operation in circuits with 5 volt supply voltage; without the use of an external current limiting resistor. Color tinted, diffused epoxy packages are used for all lamps in this group.

FEATURES

Applications include circuit board status indication; especially in TTL circuits. They allow for savings in component/assembly costs. The lamps are compatible with vapor phase reflow surface mount and conventional solder assembly.

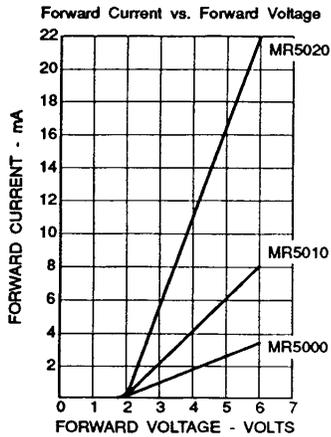
- Integral Current Limiting Resistor (No external resistor required)
- Operates with 5 Volt Supply
- All Colors
 - MR5000/5010/5020 Red Diffused
 - MR5310 Yellow Diffused
 - MR5410 Green Diffused
- Subminiature Package
- Solid-State Reliability

PHYSICAL CHARACTERISTICS		
TYPE	SOURCE COLOR	LENS COLOR
MR5000	Red	Red Diffused
MR5010	Red	Red Diffused
MR5020	Red	Red Diffused
MR5310	Yellow	Yellow Diffused
MR5410	Green	Green Diffused

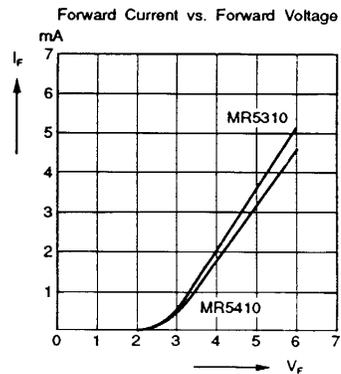
TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES

(TA = 25°C Unless Otherwise Specified)

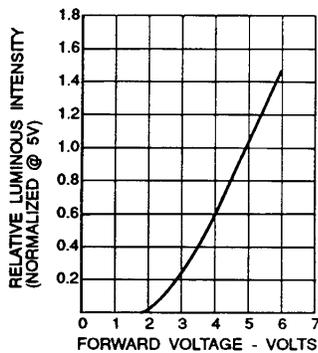
Red MR5000/5010/5020



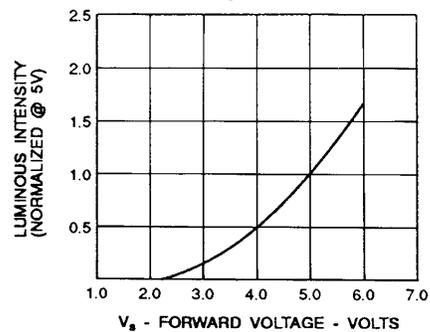
**Green MR5410
Yellow MR5310**



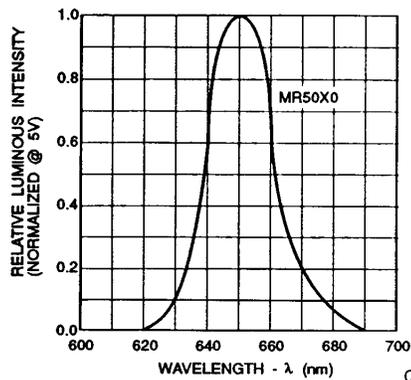
Relative Luminous Intensity vs. Forward Voltage



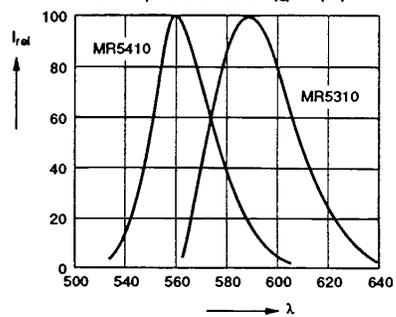
Relative Luminous Intensity vs. Forward Voltage



Spectral Distribution



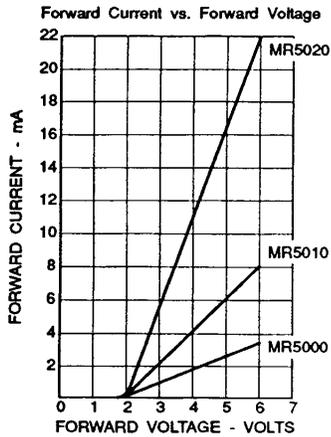
Relative Spectral Emission $I_{rel} = f(\lambda)$



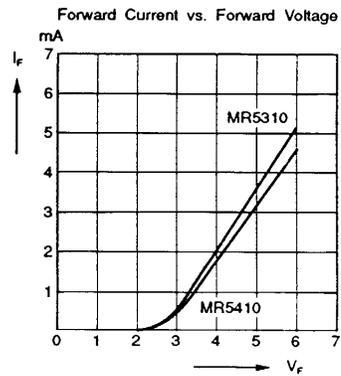
TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES

(TA = 25°C Unless Otherwise Specified)

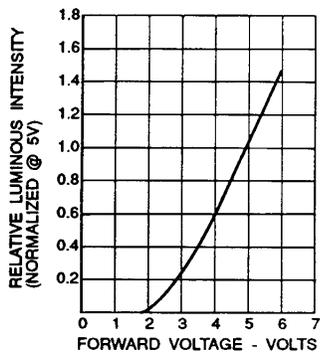
Red MR5000/5010/5020



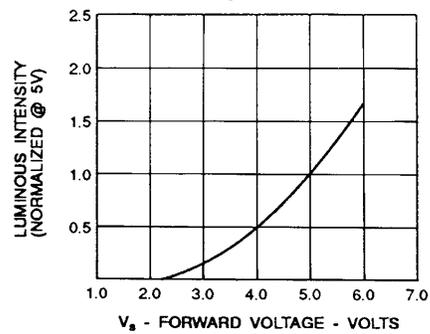
**Green MR5410
Yellow MR5310**



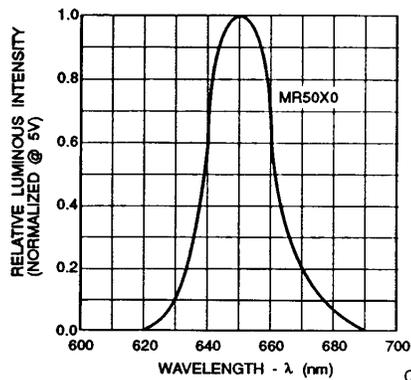
Relative Luminous Intensity vs. Forward Voltage



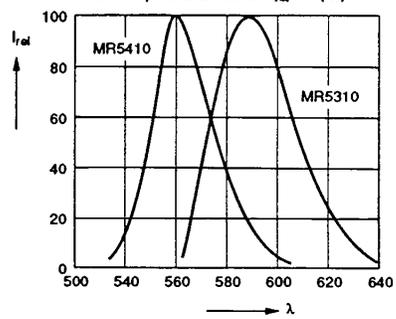
Relative Luminous Intensity vs. Forward Voltage



Spectral Distribution



Relative Spectral Emission $I_{rel} = f(\lambda)$





SUBMINIATURE T-3/4 RESISTOR LAMPS

DISCLAIMER

FAIRCHILD SEMICONDUCTOR RESERVES THE RIGHT TO MAKE CHANGES WITHOUT FURTHER NOTICE TO ANY PRODUCTS HEREIN TO IMPROVE RELIABILITY, FUNCTION OR DESIGN. FAIRCHILD DOES NOT ASSUME ANY LIABILITY ARISING OUT OF THE APPLICATION OR USE OF ANY PRODUCT OR CIRCUIT DESCRIBED HEREIN; NEITHER DOES IT CONVEY ANY LICENSE UNDER ITS PATENT RIGHTS, NOR THE RIGHTS OF OTHERS.

LIFE SUPPORT POLICY

FAIRCHILD'S PRODUCTS ARE NOT AUTHORIZED FOR USE AS CRITICAL COMPONENTS IN LIFE SUPPORT DEVICES OR SYSTEMS WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE PRESIDENT OF FAIRCHILD SEMICONDUCTOR CORPORATION. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.