

阅读申明

- 1.本站收集的数据手册和产品资料都来自互联网，版权归原作者所有。如读者和版权方有任何异议请及时告之，我们将妥善解决。
- 2.本站提供的中文数据手册是英文数据手册的中文翻译，其目的是协助用户阅读，该译文无法自动跟随原稿更新，同时也可能存在翻译上的不当。建议读者以英文原稿为参考以便获得更精准的信息。
- 3.本站提供的产品资料，来自厂商的技术支持或者使用者的心得体会等，其内容可能存在描述上的差异，建议读者做出适当判断。
- 4.如需与我们联系，请发邮件到marketing@iczoom.com，主题请标有“数据手册”字样。

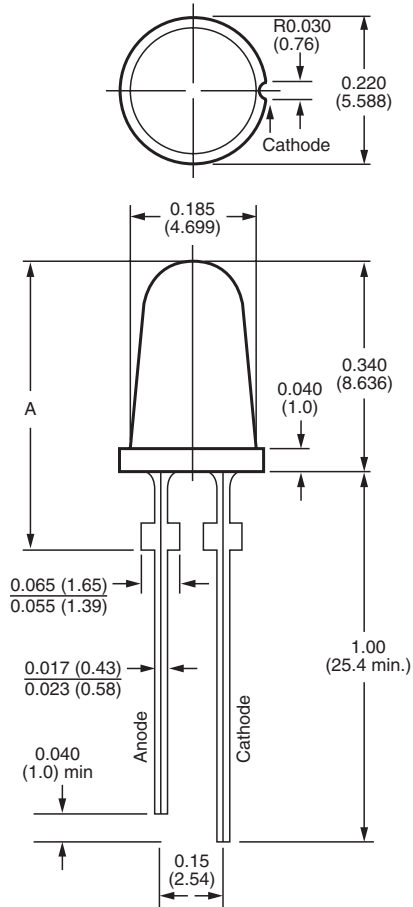
Read Statement

1. The datasheets and other product information on the site are all from network reference or other public materials, and the copyright belongs to the original author and original published source. If readers and copyright owners have any objections, please contact us and we will deal with it in a timely manner.
2. The Chinese datasheets provided on the website is a Chinese translation of the English datasheets. Its purpose is for reader's learning exchange only and do not involve commercial purposes. The translation cannot be automatically updated with the original manuscript, and there may also be improper translations. Readers are advised to use the English manuscript as a reference for more accurate information.
3. All product information provided on the website refer to solutions from manufacturers' technical support or users the contents may have differences in description, and readers are advised to take the original article as the standard.
4. If you have any questions, please contact us at marketing@iczoom.com and mark the subject with "Datasheets" .

MV502XA

Standard Red

PACKAGE DIMENSIONS



NOTES:

1. All dimensions in inches (mm).
2. Tolerances are ± 0.010 " (0.25mm) unless other specified.

DESCRIPTION

The MV502X series of solid state indicators is made with gallium arsenide phosphide light emitting diodes. Encapsulation and lens is epoxy. Various lens effects are available for many indicators applications.

FEATURES

- Tapered barrel T-1³/₄
- Red light source with various lens colors and effects
- T-1³/₄ with stand-off
- Versatile mounting on PC board or panel

PHYSICAL CHARACTERISTICS

Type	A	Lens Color	Lens Effect
MV5021A	0.430 \pm 0.015 (10.92 \pm 0.381)	White Diffused	Soft
MV5022A		Transparent Red	Point
MV5023A		Red Diffused	Soft
MV5024A	0.460 \pm 0.015 (11.60 \pm 0.381)	Red Diffused	Soft
MV5025A		Red Diffused	Flooded
MV5026A		Dark Red Diffused	Flooded

MV502XA

Standard Red

ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Rating	Unit
Power dissipation at 25°C ambient	180	mW
Derate linearly from 25°C	2	mW/°C
Storage and operating temperatures	-55°C to +100	°C
Lead soldering time at 260°C (See Note 1)	5	sec
Continuous forward current at 25°C	100	mA
Peak forward current (1µsec pulse, 0.3% duty cycle)	1.0	A
Reverse voltage	5.0	V

Notes

- The leads of the device were immersed in molten solder at 260°C to a point 1/16 inch (1.6mm) from the body of the device per MIL-S-750, with a dwell time of 5 seconds.

ELECTRICAL / OPTICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$)

Part Number	Test Conditions	Units	5021A	5022A	5023A	5024A	5025A	5026A	
Luminous Intensity	min.	$I_F = 20 \text{ mA}$	mcd	0.5	0.6	0.4	0.9	0.1	0.1
	typ.	$I_F = 20 \text{ mA}$	mcd	1.6	1.6	1.6	3.0	0.4	0.6
Peak Wavelength	$I_F = 20 \text{ mA}$	nm	660	660	660	660	660	660	
Spectral line half width	$I_F = 20 \text{ mA}$	nm	20	20	20	20	20	20	
Forward voltage V_F	typ.	$I_F = 20 \text{ mA}$	V	1.65	1.65	1.65	1.65	1.65	1.65
	max.	$I_F = 20 \text{ mA}$	V	2.0	2.0	2.0	2.0	2.0	2.0
Reverse current I_R	max.	$V_R = 5.0\text{V}$	µA	100	100	100	100	100	100
Reverse voltage V_R	min.	$I_R = 100 \text{ µA}$	V	5.0	5.0	5.0	5.0	5.0	5.0
Capacitance	typ.	$V = 0$	pF	35	35	35	35	35	35
Viewing Angle	Between 50% Points	degrees	90	90	90	60	180	90	
Rise time and fall time	10%-90% 50Ω system	nsec	50	50	50	50	50	50	
	90%-10% 50Ω system	nsec	50	50	50	50	50	50	

MV502XA

Standard Red

TYPICAL PERFORMANCE CURVES

Fig. 1 Output vs. Temperature

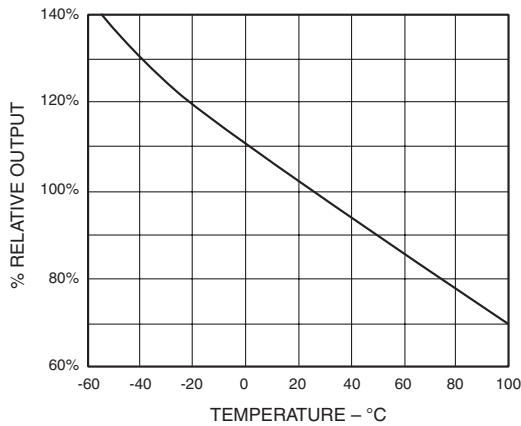


Fig. 2 Forward Current vs. Forward Voltage

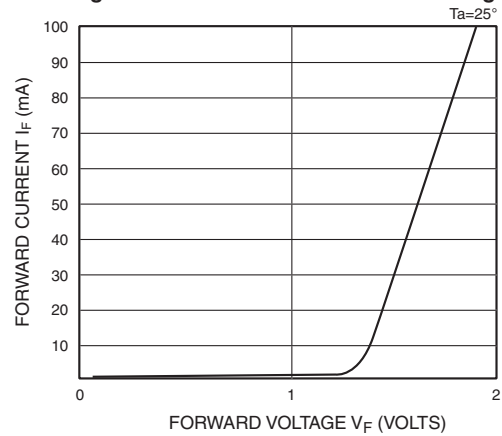


Fig. 3 Radiated Output Power vs. Peak Forward Current

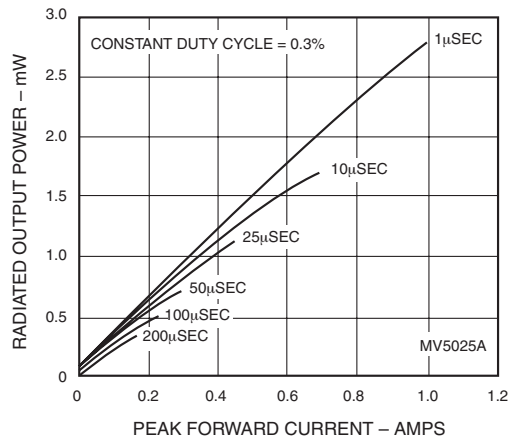


Fig. 4 Spatial Distribution

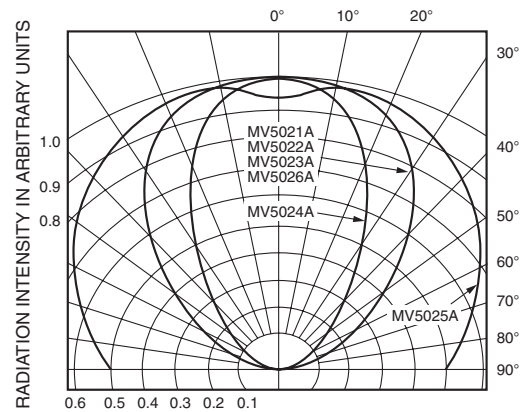
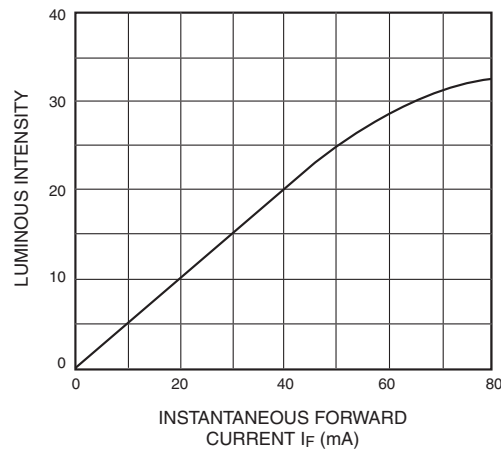


Fig. 5 Forward Intensity vs. Forward Current



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.