

1N649X
62034 **JAN QUALIFIED FAULT INDICATORS**
1N650X



12/01/03

Features:

- MIL-PRF-19500
- Hermetically sealed
- Pin compatible with Dialight 547 and 555 series
- Available with Internal Current Regulation (5 to 30 VDC)
- Wide operating temperature range (-55°C to +100°C)
- Ceramic Insulator for Side by Side Mounting

Applications:

- P.C. Board Fault Indicator
- Logic Status Indicator
- Binary Data Display
- ON-OFF Indicator
- Right Angle Viewing

DESCRIPTION

The **1N649X**, **1N650X** series indicator lamps are useful in a variety of applications such as fault indicators for trouble shooting at the P.C. board level. The red and yellow fault indicators utilize a high efficiency GaAsP on GaP LED, while the green indicator utilizes a GaP on GaP LED. Each type uses a colored diffused plastic lens over a glass window. All are hermetically sealed and available JANTX screened.

ABSOLUTE MAXIMUM RATINGS

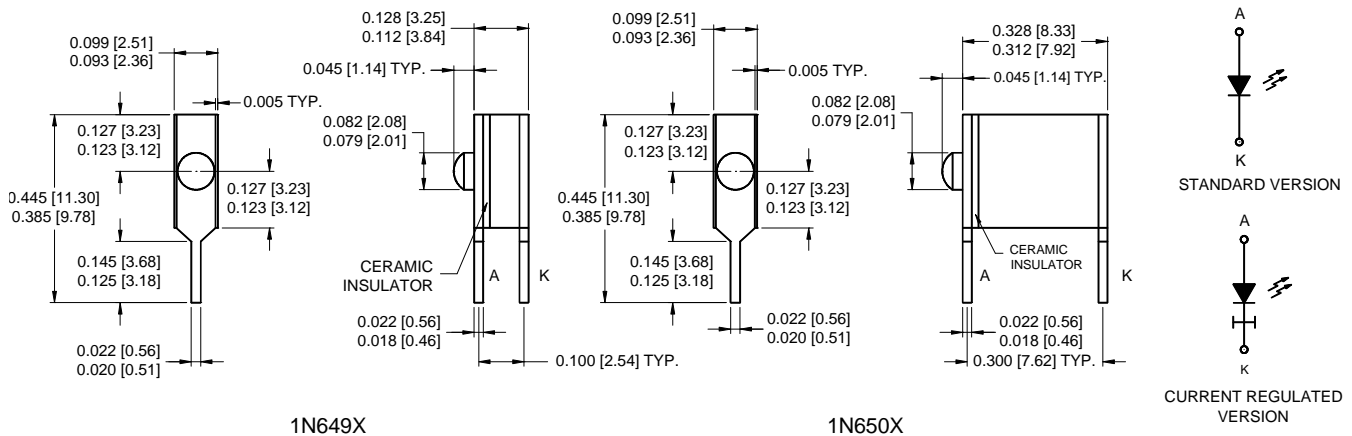
Reverse Voltage	5 V
Power Dissipation (Note 1)	105 mW
Forward Current (For part numbers 1N6493, 94, 95 and 1N6500, 01, 02)	35 mA
Forward Voltage (For part numbers 1N6497, 98, 99 and 1N6503, 04, 05)	30 Vdc
Storage Temperature	-65°C to +100°C
Operating Temperature	-55°C to +100°C
Lead Solder Temperature (10 seconds, 1/16" from case)	260°C

NOTES:

1. Derate linearly at the rate of 1.4 mW/°C above 25°C.

Package Dimensions

Schematic Diagram



ALL DIMENSIONS ARE IN INCHES [MILLIMETERS]

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

PART NUMBER	TEST CONDITIONS		PARAMETER LIMITS					
	I_F	V_F	PEAK λ	I_{V1} ($\theta = 0^\circ$)	I_{V2} ($\theta = 15^\circ$)	V_F	I_F	C
	mA	VDC	nm TYP.	mcd MIN.	mcd MIN.	V MAX.	mA MIN. – MAX.	pF MAX.
1N6493/1N6500	20	—	635 (Red)	1	0.5	3	—	100
1N6497/1N6503	—	5-30	635 (Red)	0.5	0.25	—	3.5 - 7.5	500
1N6494/1N6501	20	—	585 Yellow)	1	0.5	3	—	100
1N6498/1N6504	—	5-30	585 (Yellow)	0.5	0.25	—	3.5 - 7.5	500
1N6495/1N6502	25	—	570 (Green)	0.8	0.4	3	—	100
1N6499/1N6505	—	5-30	570 (Green)	0.4	0.2	—	3.5 - 7.5	500

* JEDEC REGISTERED DATA

RECOMMENDED OPERATING CONDITIONS:

PARAMETER	SYMBOL	MIN	MAX	UNITS
Forward Current, LED ONLY	I_F	20	35	mA
Forward Voltage, CURRENT LIMITED	V_F	5	10	V
Operating Temperature	T_A	-55	+100	$^\circ\text{C}$

SELECTION GUIDE

PART NUMBER	PART DESCRIPTION
62034-101	1N6493, Red, LED only, 0.100 Pin Spacing, Commercial
62034-102	1N6493, Red, LED only, 0.100 Pin Spacing, JAN Screened
62034-103	1N6493, Red, LED only, 0.100 Pin Spacing, JANTX Screened
62034-111	1N6497, Red, Current Regulated, 0.100 Pin Spacing, Commercial
62034-112	1N6497, Red, Current Regulated, 0.100 Pin Spacing, JAN Screened
62034-113	1N6497, Red, Current Regulated, 0.100 Pin Spacing, JANTX Screened
62034-201	1N6494, Yellow, LED only, 0.100 Pin Spacing, Commercial
62034-202	1N6494, Yellow, LED only, 0.100 Pin Spacing, JAN Screened
62034-203	1N6494, Yellow, LED only, 0.100 Pin Spacing, JANTX Screened
62034-211	1N6498, Yellow, Current Regulated, 0.100 Pin Spacing, Commercial
62034-212	1N6498, Yellow, Current Regulated, 0.100 Pin Spacing, JAN Screened
62034-213	1N6498, Yellow, Current Regulated, 0.100 Pin Spacing, JANTX Screened
62034-301	1N6495, Green, LED only, 0.100 Pin Spacing, Commercial
62034-302	1N6495, Green, LED only, 0.100 Pin Spacing, JAN Screened
62034-303	1N6495, Green, LED only, 0.100 Pin Spacing, JANTX Screened
62034-311	1N6499, Green, Current Regulated, 0.100 Pin Spacing, Commercial
62034-312	1N6499, Green, Current Regulated, 0.100 Pin Spacing, JAN Screened
62034-313	1N6499, Green, Current Regulated, 0.100 Pin Spacing, JANTX Screened
62034-101A	1N6500, Red, LED only, 0.300 Pin Spacing, Commercial
62034-102A	1N6500, Red, LED only, 0.300 Pin Spacing, JAN Screened
62034-103A	1N6500, Red, LED only, 0.300 Pin Spacing, JANTX Screened
62034-111A	1N6503, Red, Current Regulated, 0.300 Pin Spacing, Commercial
62034-112A	1N6503, Red, Current Regulated, 0.300 Pin Spacing, JAN Screened
62034-113A	1N6503, Red, Current Regulated, 0.300 Pin Spacing, JANTX Screened
62034-201A	1N6501, Yellow, LED only, 0.300 Pin Spacing, Commercial
62034-202A	1N6501, Yellow, LED only, 0.300 Pin Spacing, JAN Screened
62034-203A	1N6501, Yellow, LED only, 0.300 Pin Spacing, JANTX Screened
62034-211A	1N6504, Yellow, Current Regulated, 0.300 Pin Spacing, Commercial
62034-212A	1N6504, Yellow, Current Regulated, 0.300 Pin Spacing, JAN Screened
62034-213A	1N6504, Yellow, Current Regulated, 0.300 Pin Spacing, JANTX Screened
62034-301A	1N6502, Green, LED only, 0.300 Pin Spacing, Commercial
62034-302A	1N6502, Green, LED only, 0.300 Pin Spacing, JAN Screened
62034-303A	1N6502, Green, LED only, 0.300 Pin Spacing, JANTX Screened
62034-311A	1N6505, Green, Current Regulated, 0.300 Pin Spacing, Commercial
62034-312A	1N6505, Green, Current Regulated, 0.300 Pin Spacing, JAN Screened
62034-313A	1N6505, Green, Current Regulated, 0.300 Pin Spacing, JANTX Screened