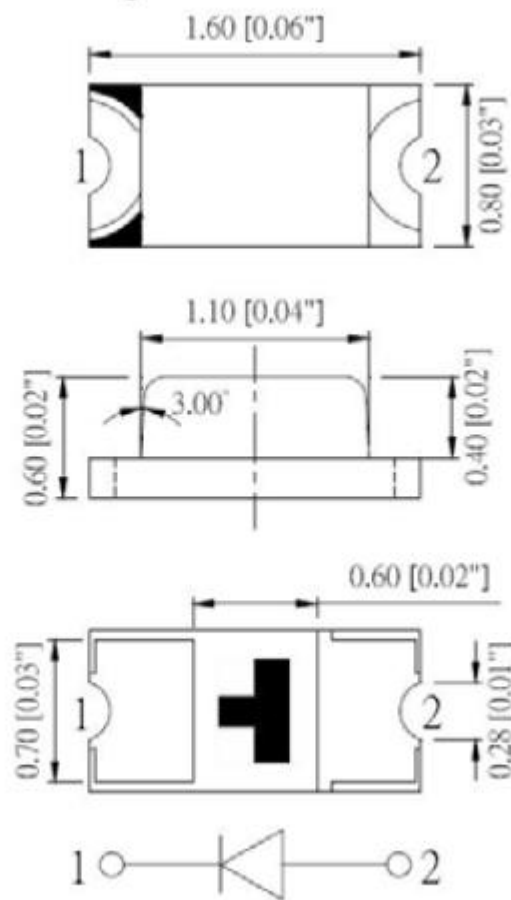


## Surface Mount Infrared LED Emitters

IR 850nm 940nm SMD 0603 LED infrared LED diode top mounted 1608 LED, SMD 0603 IR LED.

### Package Dimensions



Unit: (mm) ; Tolerance:  $\pm 0.25\text{mm}$

Parameters	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Radiant Intensity *	Ee	0.20	0.35	---	mW/sr	IF=20mA
		---	2.50	---		IF=100mA (Pulse Width $\leq$ 100 $\mu$ s, Duty $\leq$ 1%)
Viewing Angle *	2 $\theta$ 1/2	---	120	---	Deg	IF=20mA (Note 2)
Peak Emission Wavelength	$\lambda_p$	---	940	---	nm	IF=20mA (Note 3)

Spectral Bandwidth	$\Delta\lambda$	---	50	---	nm	$I_F=20\text{mA}$
Forward Voltage	VF	0.80	1.20	1.50	V	$I_F=20\text{mA}$
		---	1.60	1.80		$I_F=100\text{mA}$ (Pulse Width $\leq 100\mu\text{s}$ , Duty $\leq 1\%$ )
Reverse Current	IR	---	---	10	$\mu\text{A}$	$V_R=5\text{V}$

### SMD 0603 IR LED Applications:

1. PCB mounted infrared sensor
2. Infrared emitting for miniature light barrier
3. Floppy disk drive
4. Optoelectronic switch
5. Remote control
6. Smoke detector
7. Photo detector
8. Automatic control system
9. Light pipe application
10. General use

## APPLICATION



GaAs Chip Material Infrared Emitting Diode 0.06 Watt ir led chip 0603 SMD light emitting diode. SMD 0603 (1608) IR LED package is 4000pcs per reel. The conventional packaging is anti-static aluminum foil bag and carton.



If you have interest on our led products, how to process? We are 24 hours online service and waiting for your inquiry.

## How To Process



### LED Industry knowledge

Infrared radiation (IR) is electromagnetic radiation (EMR) with longer wavelengths than those of visible light, and is therefore generally invisible to the human eye (although IR at wavelengths up to 1050 nm from special pulsed lasers can be seen by humans under certain conditions IR wavelengths extend from the nominal red edge of the visible spectrum at 700 nanometers (frequency 430 THz), to 1 millimeter (300 GHz) Most of the thermal radiation emitted by objects near room temperature Like all EMR, IR carries radiant energy, and behaves both like a wave and like its quantum particle, the photon.

Infrared radiation is used in industrial, scientific, military, law enforcement, and medical applications. Night-vision devices using active near-infrared illumination allow people or animals to be observed without the observer being detected. Infrared astronomy uses sensor-equipped telescopes to penetrate The dusty regions of space such as molecular

clouds, detect objects such as planets, and to view highly red-shifted objects from the early days of the universe. Infrared thermal-imaging cameras are used to detect heat loss in insulated systems, to observe changing blood flow in the skin, and to detect overheating of electrical apparatus.

Extensive uses for military and civilian applications include target acquisition, surveillance, night vision, homing, and tracking. Humans at normal body temperature radiate chiefly at wavelengths around 10  $\mu\text{m}$  (micrometers). Non-military uses include thermal efficiency analysis, environmental monitoring, industrial facility inspections, detection of grow-ops, remote temperature sensing, short-range wireless communication, spectroscopy, and weather forecasting.