

**SWIR Infrared Emitter****Model No. AE1551M5**SWIR  $\lambda$  p1550nm LED

RoHS compliant

Peak Emission Wavelength : 1550nm

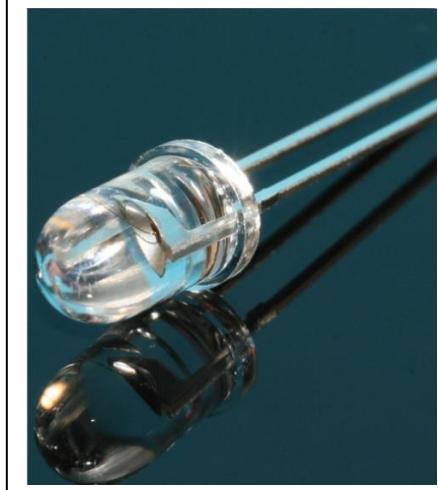
The AE1551M5 consists of a 1550nm high output infrared die in a water-clear 5mm plastic molded dome shaped package. Custom package solutions and sorting are available.

**FEATURES**

- > High output power
- > Narrow Beam Angle
- > High Reliability

**APPLICATIONS**

- > Optical Switches & Sensors
- > Fiber Optical Communication
- > Bar - code Reader

**◆ Absolute Maximum Ratings**

Ta = 25°C

Items	Symbol	Value	Unit
Forward Current (DC)	I <sub>F</sub>	100	mA
Forward Current (Pulse) <sup>*1</sup>	I <sub>FP</sub>	1	A
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	PD	120	mW
Operating Temperature Range	T <sub>opr</sub>	-20～+80	°C
Storage Temperature Range	T <sub>stg</sub>	-30～+100	°C
Junction Temperature	T <sub>j</sub>	100	°C
Lead Soldering Temperature <sup>*2</sup>	T <sub>ls</sub>	260	°C

\*1: Tw=10μsec, T=10msec; \*2: Time 5 Sec max, Position: Up to 3mm from the body.

**◆ Electrical - Optical Characteristics**

Ta = 25°C

Items	Symbol	Value			Unit	Conditions
		Min.	Typ.	Max.		
Power Output	PO	--	3.5	--	mW	IF=20mA
Power Output	PO	--	6.5	--	mW	IF=50mA
Forward Voltage	VF	--	0.9	--	V	IF=20mA
Forward Voltage	VF	--	1.0	--	V	IF=50mA
Reverse Current	IR	--	--	100	μA	VR=5V
Peak Emission Wavelength	λ p	--	1550	--	nm	IF=50mA
Spectral Line Half Width	Δ λ	--	100	--	nm	IF=50mA
Half Intensity Beam Angle	θ	--	±5	--	deg	IF=50mA

