

**SMD type**

**Model No. AL853SMD**

*Infrared Point source LED*

RoHS compliant

**◆ Absolute Maximum Ratings**

T<sub>a</sub> = 25°C

Parameter	Symbol	Value	Unit
Forward Current (DC)	I <sub>F</sub>	50	mA
Pulse Forward Current <sup>*1</sup>	I <sub>FP</sub>	0.3	A
Reverse Voltage (DC)	V <sub>R</sub>	5	V
Power Dissipation	P <sub>D</sub>	120	mW
Operating Temperature	T <sub>opr</sub>	-20 ~ +85	°C
Storage Temperature	T <sub>stg</sub>	-30 ~ +100	°C

<sup>\*1</sup> : Tw=10 μ s, T=10mS

**◆ Electro-optical Characteristics**

T<sub>a</sub> = 25°C

Parameter	Symbol		Value	Unit	
Radiated Power	P <sub>O</sub>	Min	1.0	mW	I <sub>F</sub> = 50mA
		Typ	1.8		
Forward Voltage	V <sub>F</sub>	Typ	1.8	V	I <sub>F</sub> = 50mA
		Max	2.2		
Reverse Current	I <sub>R</sub>	Max	10	μ A	V <sub>R</sub> = 5V
Peak Wavelength	λ <sub>p</sub>	Typ	850	nm	I <sub>F</sub> = 50mA
Spectral Line Half width	Δ λ	Typ	40	nm	I <sub>F</sub> = 50mA
Band Width	f <sub>c</sub>	Typ	20	MHz	I <sub>F</sub> =50mA+20mA <sub>p-p</sub>
Junction Capacitance	C <sub>j</sub>	Typ	40	pF	1MHz, V=0V
Temp. Coefficient of P <sub>O</sub>	P/T	Typ	-0.05	%/°C	I <sub>F</sub> =10mA
Temp. Coefficient of V <sub>F</sub>	V/T	Typ	-2.3	mV/°C	I <sub>F</sub> =10mA

**◆ External Dimension**