



RC650-SMD85

- Red Resonant Cavity Light Emitting Diode
- 650 nm, 1 mW
- No Threshold
- SMD Package, 1.6 x 0.8 x 0.6 mm

Description

RC650-SMD85 is a red resonant cavity light emitting diode chip die, emitting at typically 650 nm with rated output power of 1 mW cw. The RC LED has no threshold. The chip die is mounted into SMD package

Maximum Ratings

Parameter	Symbol	Values		Unit
		Min.	Max.	
Forward Current	I_F		30	mA
Reverse Voltage (@ 10 μ A)	V_F		5	V
Operating Temperature	T_{CASE}	- 20	+ 70	$^{\circ}$ C
Storage Temperature	T_{STG}	- 40	+ 100	$^{\circ}$ C
Lead Solder Temperature *	T_{SLD}		+ 260	$^{\circ}$ C

* must be completed within 5 seconds

Laser Characteristics ($T_{CASE}=25^{\circ}$ C)

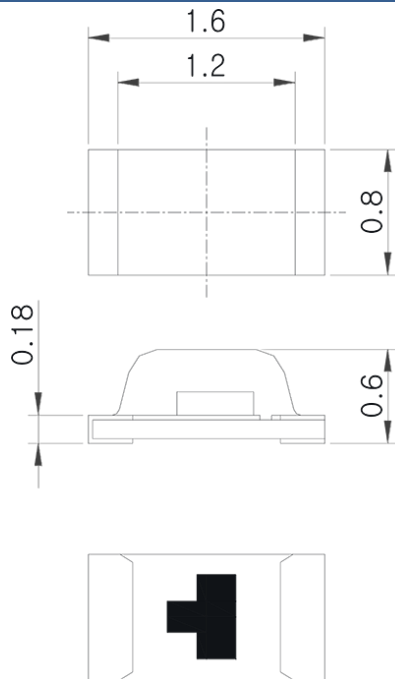
Parameter	Symbol	Conditions	Values			Unit
			Min.	Typ.	Max.	
Peak Wavelength	λ_P	$I_F=20$ mA	640	650	665	nm
Half Width	$\Delta\lambda$	$I_F=20$ mA		7		nm
Forward Voltage	V_F	$I_F=20$ mA		2.2		V
Forward Current	I_F			20		mA
Radiated Power	P_O	$I_F=20$ mA		1.0		mW
Radiant Intensity	I_E	$I_F=20$ mA	0.2	0.3		mW/sr
Beam Divergence	θ	$I_F=20$ mA, FWHM		90		deg.
Rise Time	t_R	$I_F=20$ mA, (10-90%)		3		ns
Fall Time	t_F	$I_F=20$ mA, (10-90%)		3		ns
Data Rate	T_{DATA}	$I_F=20$ mA		155		Mbps



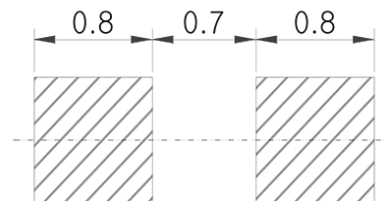
Outline Dimensions

RC650-SMD85

SMD



For Reflow Soldering



All Dimensions in μm

© All Rights Reserved

The above specifications are for reference purpose only and subjected to change without prior notice