Dual-Color Type Chip LEDs with reflector

SML-020 Series

		Green	Red GaAIAs on GaAs		
Package Size (mm)	Part No.	GaP			
		570nm	660nm		
3225 (1210) 3.0×2.5 t=1.3	SML-020MLT	0	0		

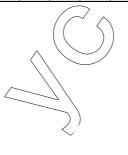
■ Absolute Maximum Ratings (Ta=25°C)

Part No.	Emitting color	Power dissipation Po (mW)	Forward current IF (mA)	Peak forward current * IFP (mA)	Reverse voltage VR (V)		Stotage temperature T _{stg} (°C)
SML-020MLT	Green	60	25	60	4	-30 to +85	-40 to +85
	Red	00	30	75	1 4		

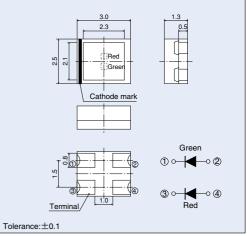
* IFP measured under duty $\leq 1/5$, pulse width ≤ 1 ms.

Electrical Optical Characteristics (Ta=25°C)

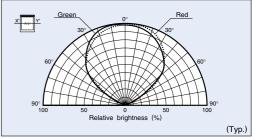
	Part No.	Resin Color	Forward voltage VF IR		rent	Light wavelength Peak Half-wave λp Δλ		Brightness Iv		\sum			
			Тур. (V)	lF (mA)	Max. (µA)	Vr (V)	Typ. (nm)	Typ. (nm)	lF (mA)	Min. (mcd)	Typ. (mcd)	lF (mA)	ľ
SML-020MLT		Transparent Clear	2.2	20	100	4	570	40	20	9.0	20	20]
	Transparent Clear	1.75	75 20	100	4	660	25	20	9.0	16	20		

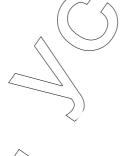


External Dimensions (Unit : mm)

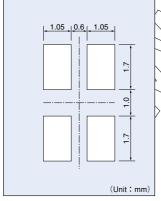


Directivity



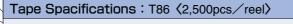


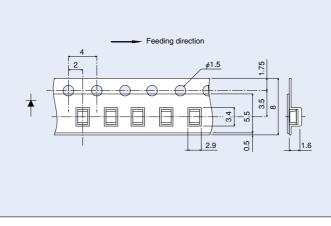
Recommended Pad Lavout

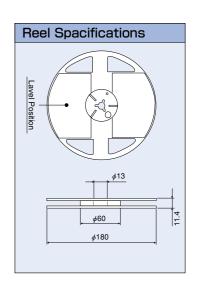


The recommended thickness of the screen mask for soldering is between 100 and 200 $\mu\text{m}.$ The hole size of the screen mask should be same as the recommended land pattern or smaller.

Rackaging Spacifications (Unit : mm)

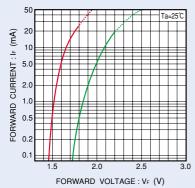




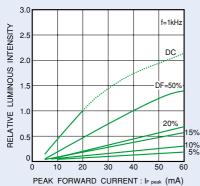


Electrical Characteristic Curves

Forward Current - Forward Voltage



Relative Luminous Intensity - Forward Current



1 0kHz –

50 10

PULSE DURATION : Tw (μ s)

5kHz 2kHz

1 KHZ

10

50kHz 20kHz

1.0 0.5 10% 5% 0 10 20 30 40 Ratio of Maximum Tolerable Peak Current - Pulse Duration 200Hz-10kHz -500Hz -HOO 50kHz = 20kHz⁻ 5kHz 2kHz ĘŦ 25

Derating

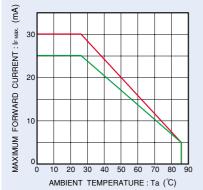
1

5

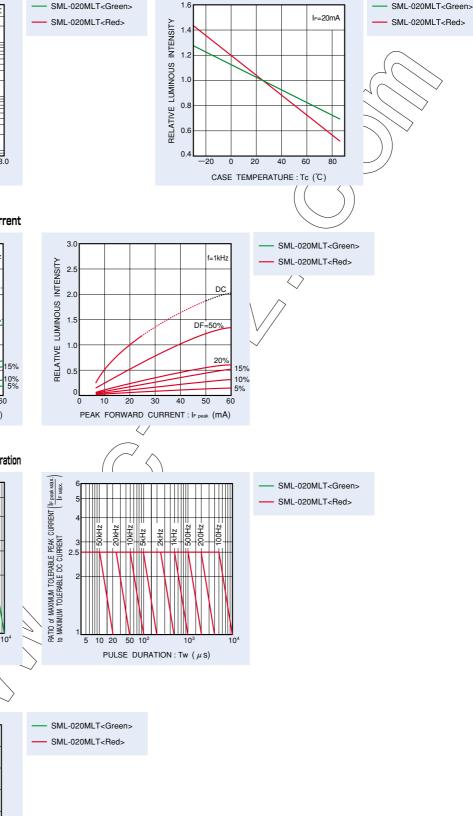
10 20

RATIO of MAXIMUM TOLERABLE PEAK CURRENT (IF peak wax. to MAXIMUM TOLERABLE DC CURRENT (IF MAX.

2.



Relative Luminous Intensity - Case Temperature



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