

Peak Emission Wavelength: **1020nm**


Description

- Size 3.8 (W) x 3.8 (L) x 0.9 (H) SMD 3838 Case
- Circuit substrate: AlN ceramics
- Devices are RoHS conform
- Lead free solderable, soldering pads: silver plated
- Taped in 16 mm blister tape, cathode to transporting perforation
- All devices are sorted into radiant intensity classes
- Taping: face up (T)
- High radiation intensity types

Absolute Maximum Ratings (Ta=25°C)

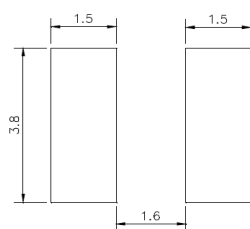
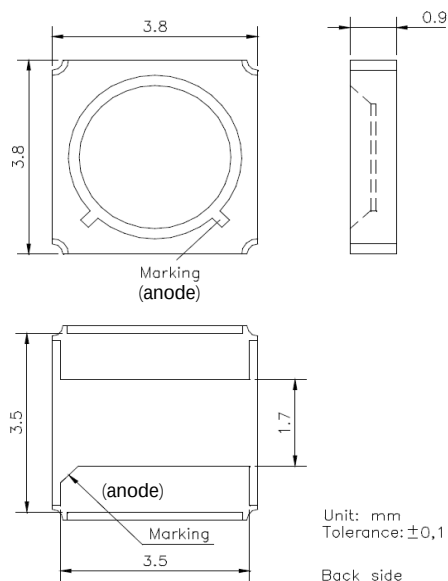

ITEMS	SYMBOL	RATINGS	UNIT
Forward DC Current	If	500	mA
Peak Forward Current *	Ifp	1000	mA
Reverse Voltage	Vr	5	V
Reverse Current	Ir	100	uA
Operating Temperature	Top	-40 to +85	°C
Storage Temperature	Tst	-40 to +85	°C
Thermal Resistance RthJA		10	K/W

* tp ≤ 100 us, T=1:10

Electrical & Optical Characteristics (Ta = 25°C)

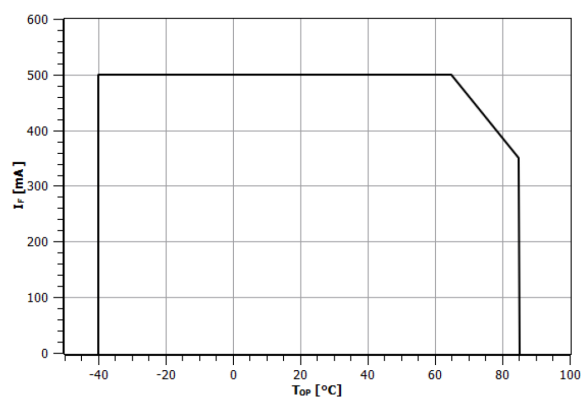
ITEMS	SYMBOL	MIN	TYP	MAX	UNIT
Forward Current	If	--	350	--	mA
Forward Voltage	Vf	--	1.2	1.5	V
Peak Wavelength	λp	1005	1020	1035	nm
Radiant Intensity	Ie	8.5	17	--	mW/sr
Spectral Bandwidth	Δλ	--	40	--	nm

Package Dimensions

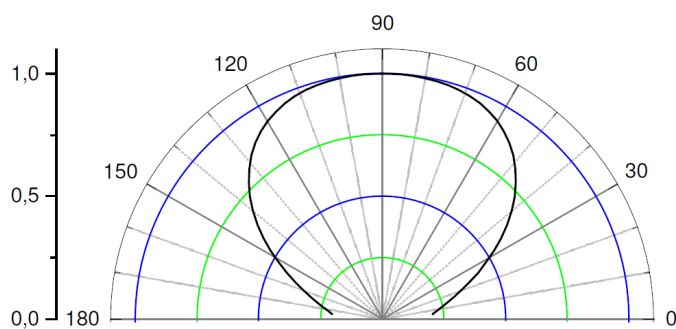


recommended max. thermal resistance
device—ambient: 20 K/W

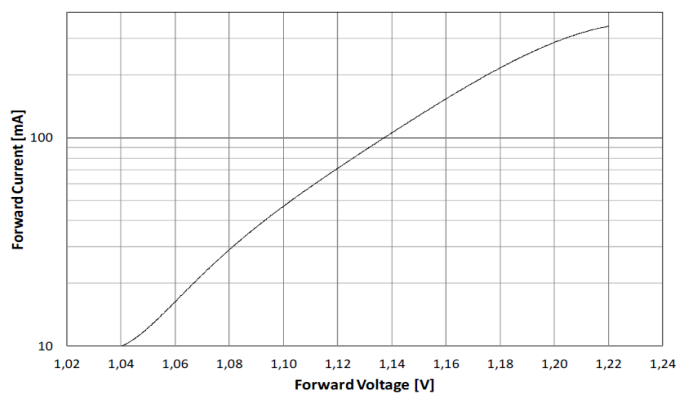
Recommended Soldering Pattern



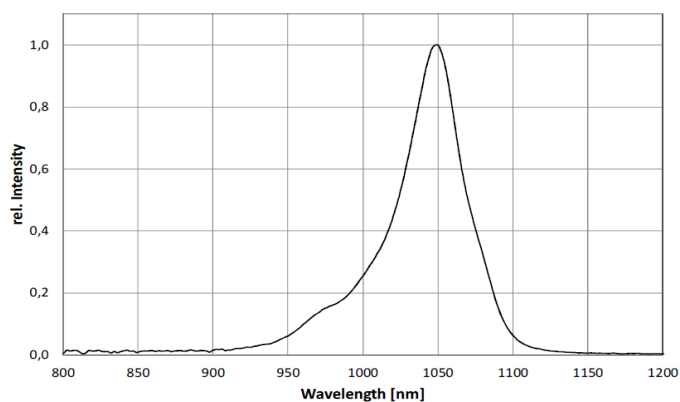
**Maximal
forward
current (DC)
characteristic**



View angle

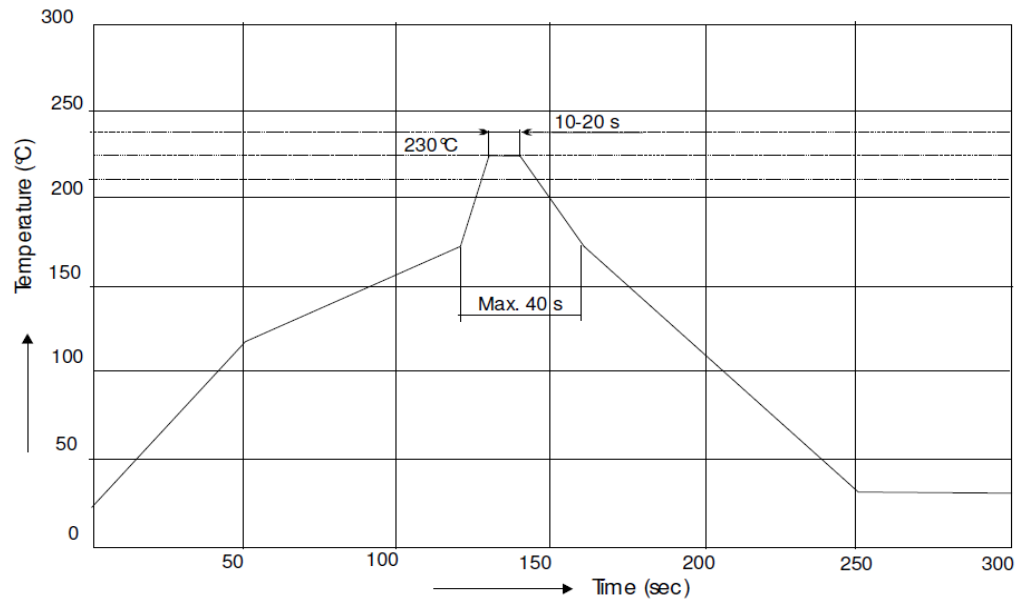


**$U_F - I_F$
characteristic**

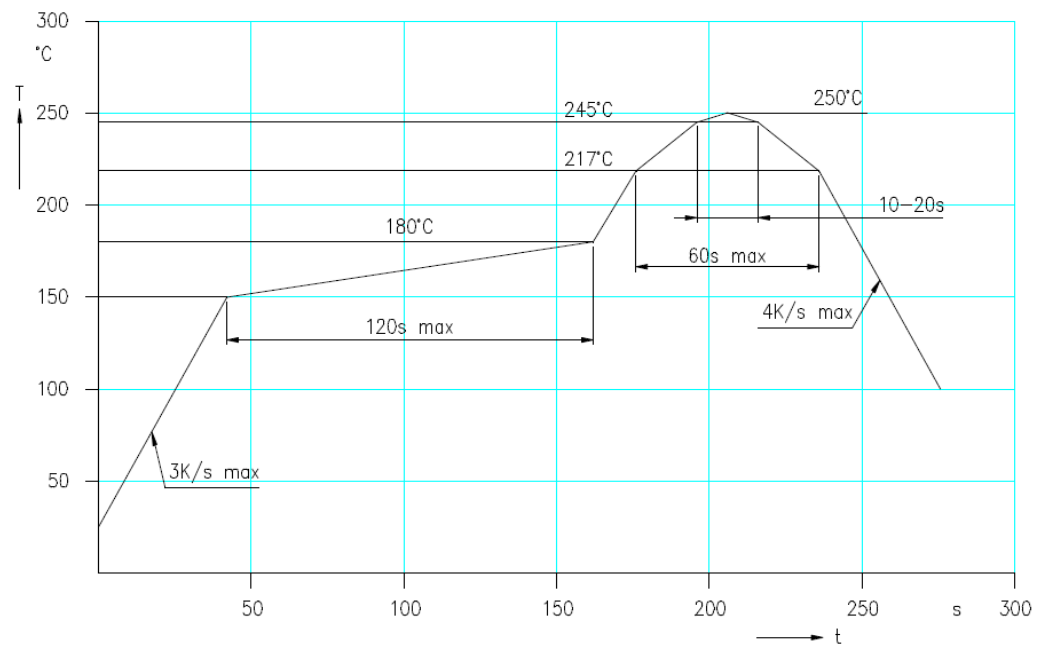


**$I_F - I_{e, rel}$
characteristic**

**IR reflow
soldering
profile**



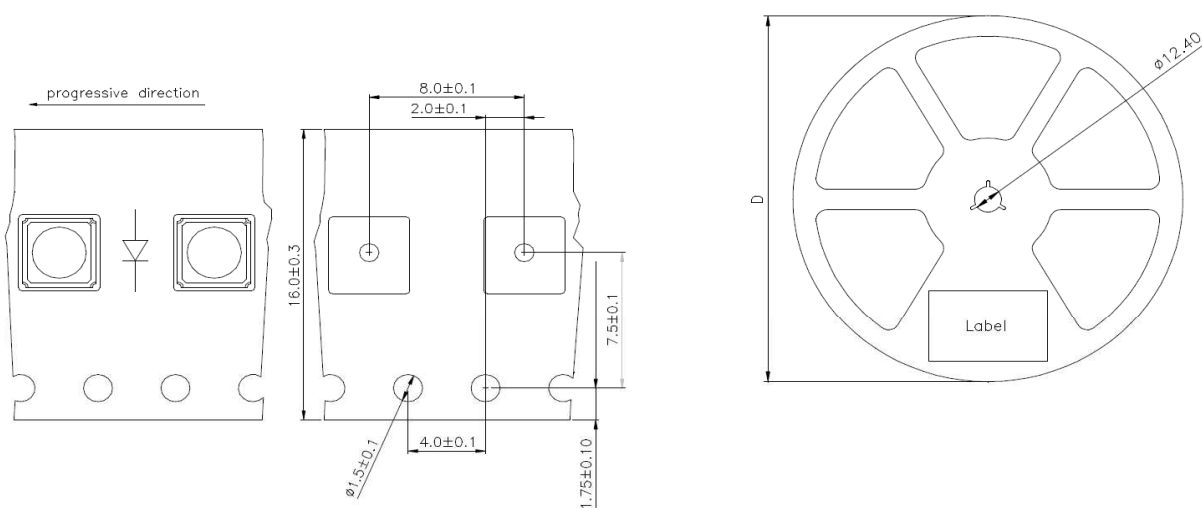
**IR reflow
soldering
profile for lead
free soldering**



Manual soldering:
max power of iron 25 W / 3 s / 300°C

Measured according to CIE 127. All SMD-LEDs are 100% measured and selected on full automated equipment with an accuracy of $\pm 11\%$.

Tape and Reel packing



Tape and Reel - Suffice to the part number	
Ex:	MTXXXXX-T05 = 500 piece reel
Code	Components per reel
T05	500
T1	1000
T2	2000
T25	2500
T3	3000

Packing: The reel is seaLED in special plastic bag with integrate ESD protection (MIL - STD 81705) including a silica dry-pack

Mouser Electronics

Authorized Distributor

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[MTSM2010-496-IR](#)