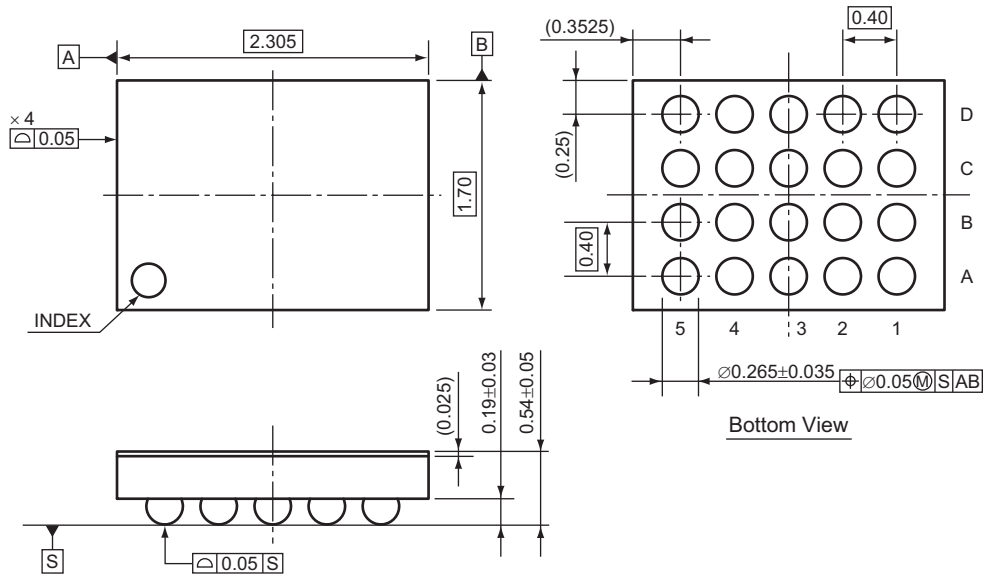


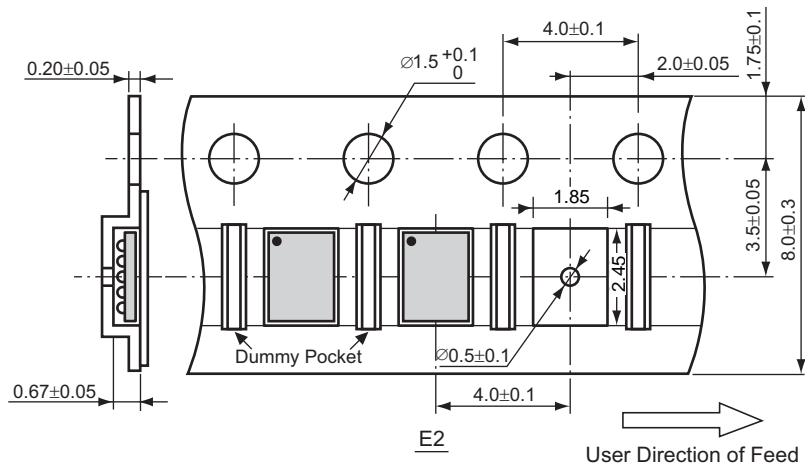
• WLCSP-20-P1

Unit: mm

PACKAGE DIMENSIONS

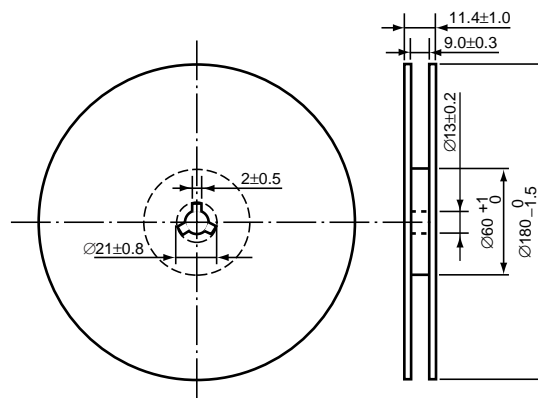


TAPING SPECIFICATION



TAPING REEL DIMENSIONS REUSE REEL (EIAJ-RRM-08Bc)

1 reel = 5,000 pcs



## POWER DISSIPATION (WLCSP-20-P1)

Power Dissipation ( $P_D$ ) depends on conditions of mounting on board. This specification is based on the measurement at the condition below:

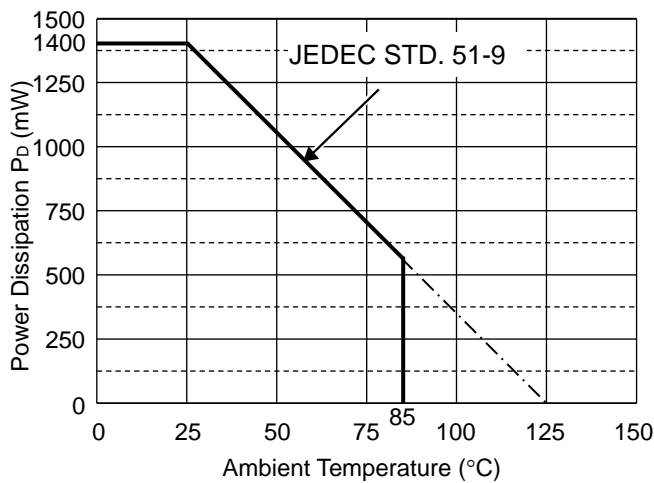
### Measurement Conditions

	JEDEC STD. 51-9 Test Land Pattern
Environment	Mounting on Board (Wind velocity = 0 m/s)
Board Material	Glass cloth epoxy plastic (4-Layer)
Board Dimensions	101.5 mm × 114.5 mm × 1.6 mm
Copper Ratio	Top-side, Back-side: Approx. 60% 2nd, 3rd Layer: Approx. 100%

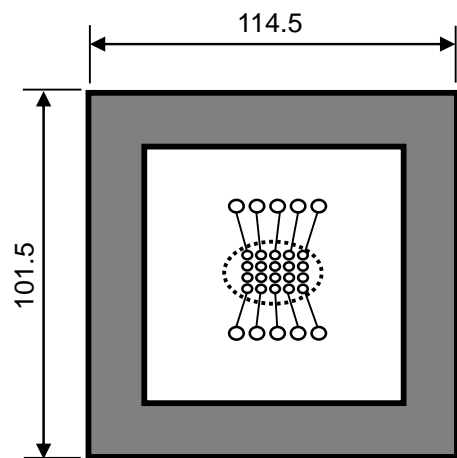
### Measurement Result

( $T_a = 25^\circ\text{C}$ ,  $T_{j\text{max}} = 125^\circ\text{C}$ )

	JEDEC STD. 51-9 Test Land Pattern
Power Dissipation	1400 mW
Thermal Resistance	$\theta_{ja} = (125 - 25^\circ\text{C})/1.4 \text{ W} = 71^\circ\text{C/W}$



Power Dissipation vs. Ambient Temperature

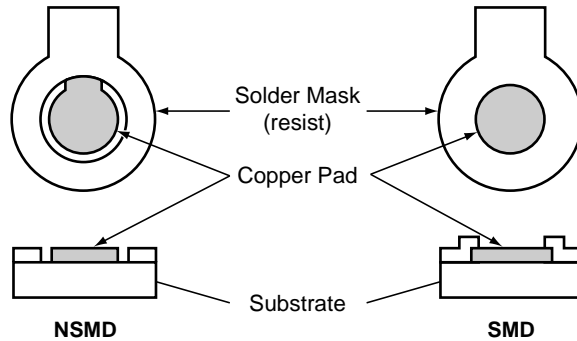


 IC Mount Area

Unit: mm

Measurement Board Pattern

RECOMMENDED LAND PATTERN



NSMD and SMD Pad Definition

Pad definition	Copper Pad	Solder Mask Opening
NSMD (Non-Solder Mask defined)	0.24 mm	Min. 0.29 mm
SMD (Solder Mask defined)	Min. 0.29 mm	0.24 mm

Pad layout and size can be modified by customers material, equipment, method.

Please adjust pad layout according to your conditions.

Recommended Stencil Aperture Size...ø0.265 mm

Since lead free WL-CSP components are not compatible with the tin/lead solder process, you shall not mount lead free WL-CSP components using the tin/lead solder paste.