

# USB Type-C Waterproof Connector CAM-L41 / R41-B542A

# MITSUMI

## FEATURES

Model Name	CAM-L41
Part Number	R41-B542A
Description	USB Type-C Connector, Receptacle, Waterproof
Type	Midmount SMT
TID Number	1877
IP Index	IP68
Connectivity Standards	Thunderbolt 3™



External Dimensions	
Height	3.43 mm
Width	11.50 mm
Depth	8.40 mm

Packing	
Weight/Unit	0.50 g
Reel	1500 pcs/reel; 7500 pcs (5 reels)/carton

## SPECIFICATIONS

Electrical Characteristics	
Low Level Contact Resistance	Initial: 40 mΩ max; After 50 mΩ max
Dielectric Strength	AC 100V, 1 min
Insulation Resistance	DC 500V 100 MΩ min
Contact Current Rating	Vbus 5A, Vconn 1.25A through GND and the other 0.25A. Δ t: 30 °C max
Power Delivery	100W

Transfer Characteristics (Informative)	
Differential Insertion Loss Fit at Nyquist Frequencies	Thunderbolt 3 Standard
Integrated Differential Multi-reflection	Thunderbolt 3 Standard
Integrated Differential Near-end Crosstalk on Super Speed	Thunderbolt 3 Standard
Integrated Differential Far-end Crosstalk on Super Speed	Thunderbolt 3 Standard
Differential Crosstalk on D+/D-	Thunderbolt 3 Standard
Integrated Return Loss	Thunderbolt 3 Standard
Differential to Common Mode Conversation	Thunderbolt 3 Standard

Mechanical Characteristics	
Insertion Force	5~20N
Extraction Force	Initial: 8~20N After durability: 6~20 N
Durability	10,000 cycles
Vibration	20~500 Hz / 30 m/s <sup>2</sup> (3.1 G) / X, Y, and Z direction each 15 min
4-axis Continuity	20 N, 10 sec, up down left and right, 15 mm from exit of connector

Environmental Conditions	
Temperature Life	105 ± 2 °C, 120H
Thermal Shock	-55 °C ~ 85 °C each 30 min 10 cycles
Temperature and Humidity Cycle	25 ± 3 °C 80±3% ~ 65±3 °C 50±30%RH each 30min 24cycles
Mixed Flowing Gas	30±2°C, 70±2%RH, H2S:10±5ppb, SO2:100±20ppb, NO2:200±50ppb, Cl2:10±3ppb ; Unmated 112H and Mated 56H
Maximum Soldering Temperature	250 °C, 10 sec, 2 times
RoHS Compliant/Lead Free	Compliant

