



Product Specification :	ISSUED BY: Engineering Dept	
Subject : 2.54mm Pitch SCT2543 Series Connector Specification	Date Issued	2023/04/20
	Date Revised	2023/04/20

This specification is referred to the 2.54mm series wire to board connector

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<p>1. Scope This Specification Covers the 2.54mm Pitch SCT2543 Series Connector Specification</p> <p>.2. Spec and Part number</p>			
Specification	Production No.	Picture of Product	
Terminal	SCT2543FTBF110 SCT2543FTBx112 SCT2543MTBx112	NONE	
Housing	SCT2543H-2xxYBK116 SCT2543H-205YBK116-DXP SCT2543HNL-2xxYBK116 SCT2543HNL-2xxYBK116 SCT2543H-xxYBK116	NONE	
3. Disposal of Material and surface			
Specification	Materials	Disposal of Surface	
Terminal	Brass	Tin Plated:Over 70μ " . Nickel: Over 30 μ " .	
Housing	PPO	UL 94V-0	
(Please Refer to the Project drawing for the above Specification)			
4. Ratings and applicable wires			
Item	Standard		
Rated Voltage (Max.)	250V	[AC/DC]	
Rated Current (Max.)	3.0A		
Ambient temperature Range	-25C~+85C		
Applicable wire insulation O. D	AWG 22#~28# Insulation O. D. 1.90mm(Max.)		
*Including terminal temperature rise.			



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5. PERFORMANCE

5-1. Electrical Performance.

Item		Test Condition	Requirement
5-1-1	Contact Resistance	Mate connectors, measure by dry circuit, 20mV MAX, 10mA. (Based upon EIA-364-06A).	Initial : 10 milliohms Max. After Test :
5-1-2	Insulation Resistance	Mate connectors, apply 500V DC between adjacent terminal or ground. (Based upon EIA-364-21B/ MIL-STD-202 Method 302 Cond. B)	1000 Megohms Min.
5-1-3	Dielectric Strength	Mate connectors, apply 500V AC for 1 minute between adjacent terminal or ground. (Based upon EIA-364-20A/ MIL-STD-202 Method 301)	No Breakdown and Flashover
5-1-4	Contact resistance on crimped portion	Crimp the applicable wire on to the terminal measure by dry circuit 20mV MAX, 10mA.	5 milliohms Max.

5-1. Electrical Performance

Item		Test Condition	Requirement
5-2-1	Insertion & Retention Force	Insert and withdraw Connectors at the speed rate of 25.4±3mm/minute.	Refer to paragraph 6
5-2-2	Terminal / Housing Retention Force	Apply axial pull out force at the rate of 25.4±3mm/minute terminal assembled in the housing.	17.79N {1.8kgf} Min.
5-2-3	Terminal Insertion Force	Insert the crimped terminal into the housing.	14.7N { 1.5kgf} Max.
5-2-4	Pin Retention Force	Apply axial push force at the speed of 25.4±3mm/minute.	14.7N { 1.5kgf} Min.

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5-2. Mechanical Performance.

5-3. Environmental Performance and Others.

Item	Test Condition	Requirement
5-3-1	Repeated Insertion/Withdrawal When mated up to 50 cycles repeatedly by the rate of 10 cycles per minute.	Contact Resistance 20 milliohms Max.
5-3-2	Temperature Rise Carrying rated current load. (UL 1977)	Temperature rise 30CMax.
5-3-3	Vibration Amplitude: 1.5mm P- P Sweep time: 10~55~10 HZ in 1 minute Duration: 2 hours in each X.Y.Z axials. (Based upon EIA-364-28B/ MIL-STD-202 Method 213B Cond.A)	Appearance No Damage Contact Resistance 20 milliohms Max. Discontinuity 1 micro-second Max.
5-3-4	Shock 490m/s {50G}, 3 strokes in each X.Y.Z. axes. (Based upon EIA-364-27B/ MIL-STD-202 Method 213B Cond.A)	Appearance No Damage Contact Resistance 20 milliohms Max. Discontinuity 1 micro-second Max.
5-3-5	Heat Resistance 85± 2 Cond.A	

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Item	Test Condition	Requirement
5-3-6 Cold Resistance	-25± 5C,96 hours . (Based upon EIA-364- 105)	Appearance No Damage Contact Resistanc 2 0 milliohms Max.
5-3-7 Humidity	Temperature: 4 0 ± 2 Humidity: 9 0 ~ 9 5	



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6. INSERTION/WITHDRAWAL FORCE <Connector mating force>

No. of CKT	First Insertion (kgf Max.)	30 th Withdrawal (kgf Min.)	No. of CKT	First Insertion (kgf Max.)	30 th Withdrawal (kgf Min.)
02	0.50	0.10	09	2.00	0.45
03	0.80	0.15	10	2.20	0.50
04	1.00	0.20	11	2.40	0.55
05	1.20	0.25	12	2.60	0.60
06	1.40	0.30	13	2.80	0.65
07	1.60	0.35	14	3.00	0.70
08	1.80	0.40	15	3.20	0.75

Note: Insertion and Withdrawal for 30 Cycles