

SMD EMI Filters Common Mode Choke



Preview

www.token.com.tw

Token EMI filters SMD common mode choke TCPWC series are primarily designed for choking power lines and conform to the RoHS compliant and Lead-free. SMD choke EMI filters feature with ultra-compact size, wide inductance selection, and low-resistance coils. SMD TCPWC can be customed designs and tighter tolerances available on request.

Token's TCPWC taking advantage of the latest winding technology consists ferrite core and a pair lines enabling the most effective in noise suppression designs. Feature high common-mode impedance at noise band and low differential-mode impedance at signal band. Low differential-mode impedance with high coupling factor, there is almost no distortion on high speed signal.

Application of SMD choke EMI filters specific designs also available including different inductance values and Q specifications adjusted to frequency requirements.

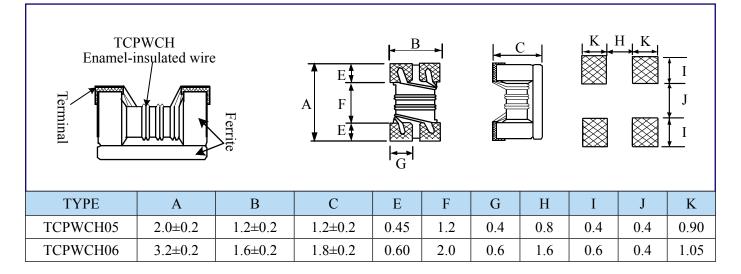
Token will also produce devices outside these specifications to meet customer requirements, with comprehensive application engineering and design support available for customers worldwide.

Applications :

- USB Line for Personal Computers and Peripheral.
- IEEE 1394 Line for Personal Computers ,DVC ,STB.
- LCD Panels. Low-Voltage Differential Signal (LVDS).
- EMI Radiation Noise Suppression for Any Electronic Device.



Configurations & Dimensions



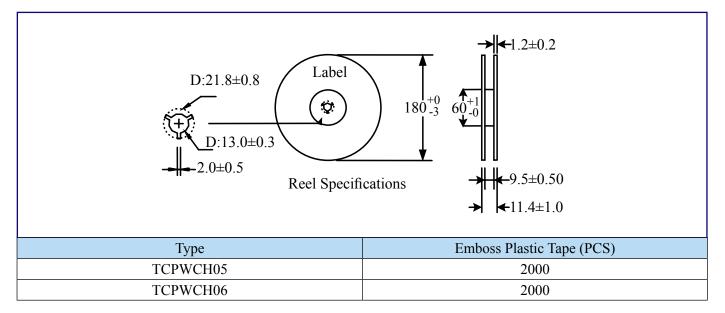
Electrical Characteristics

Part Number	Impedance (Ω) 100MHz	DCR (Ω)(max)	Rated Current (mA)(max)	Rated Voltage (V)(DC)	Withstanding Voltage (V)(DC)	Insulation Resistance (MΩ)(min)
TCPWCH05MT670	67	0.25	400	50	125	10
TCPWCH05MT900	90	0.35	330	50	125	10
TCPWCH05MT121	120	0.30	370	50	125	10
TCPWCH05MT181	180	0.35	330	50	125	10
TCPWCH05MT201	200	0.35	330	50	125	10
TCPWCH05MT261	260	0.40	300	50	125	10
TCPWCH05MT371	370	0.40	280	50	125	10
TCPWCH06MT900	90	0.30	370	50	125	10
TCPWCH06MT161	160	0.40	340	50	125	10
TCPWCH06MT261	260	0.50	310	50	125	10
TCPWCH06MT601	600	0.80	260	50	125	10
TCPWCH06MT102	1000	1.00	230	50	125	10
TCPWCH06MT222	2200	1.20	200	50	125	10

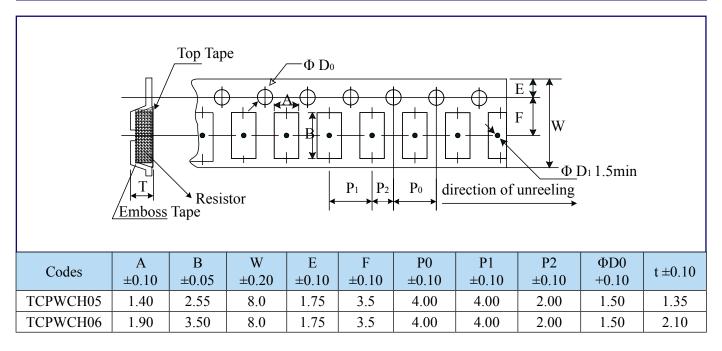
Note: Operating Temp.: -40°C+85°C.



Packaging Quantity & Reel Specifications

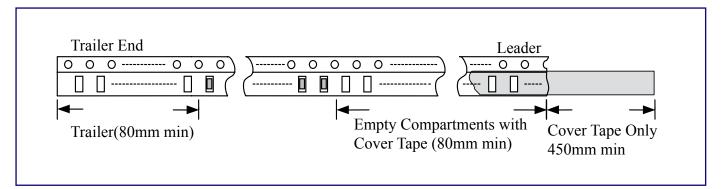


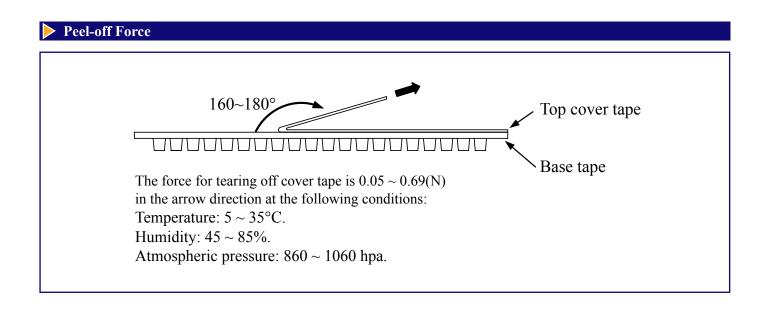
Emboss Plastic Tape Specifications



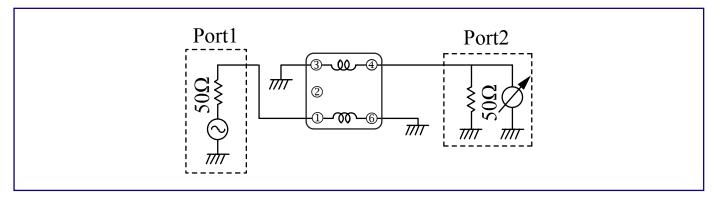


Leader / Tape





> (TCB4F - 617DB) Electrical Characteristics C



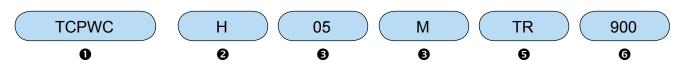
Environmental Characteristics

Test Items	Specifications	Test Conditions / Test Methods		
Electrical Performance	ce Test			
Impedance	Refer to standard	LCR Meter HP 4291B		
DC Resistance (RDC)	electrical characteristic spec.	Micro-Ohm meter (GOM-801G)		
Withstand Voltage (VDC)		Test Voltage: 2.5 Times Rated Voltage; Testing Time: 60 sec. Charge Current: 0.5mA		
Rated Voltage (VDC)	Component should not be damaged	Test Voltage: Rated Voltage; Testing Time: 1 to 5 sec; Charge Current: 1mA		
Insulation Resistance (I.R.)		Charge Current: 1 minute 10M ohm min		
Mechanical Performa	ince Test			
Component Adhesion (push Test)	Base: $0805 \ge 2$ Lbs Cover: $0805 \ge 1$ Lbs Base: $1206 \ge 4$ Lbs Cover: $1206 \ge 2$ Lbs	component should be soldered (232°C±5°C for 10 sec.) and copper substrate. Applied force gauge to the side of ponent It must withstand force of 2 or 4 pounds without are of the component.		
Drop Test	Component should not be damaged	Dropping chip by each side and corner; Drop 10 times in total Drop height:100cm; Drop weight:125g		
Solderability Test	The terminal should at least be 90% covered with solder	The component shall be dipped in a melted solder bath at 235°C±5°C for 5 seconds.		
Vibration Test (Low Frequency)	Component should not be damaged	1. Amplitude: 1.5 m/m; 2. Frequency: 10-55-10 Hz(1min); 3. Direction: X, Y, Z; 4. Duration: 2 Hrs/X, Y, Z.		
Climatic Test				
Low Temperature Storage Test		1. Temp: -40°C±C2°C; 2. Time: 1000±48 Hours; 3. Component should be tested after 1 hour at room temperature.		
Thermal Shock Test	Impedance change: Within±20% Without distinct damage in	$\begin{array}{ c c c c c }\hline & & \hline & \hline & & \hline & \hline & & \hline \hline & \hline & \hline \hline & \hline \hline & \hline \hline & \hline \hline \hline & \hline \hline & \hline \hline \hline & \hline \hline \hline \hline & \hline \hline$		
High Temperature Storage Test	ppearance.	 Temp: 85°C±2°C; 2. Time: 1000±48 Hours; Component should be tested after 1 hour at room temperature. 		
Humidity Test		1. Temp: 40°C±2°C; 2. R.H.: 90%~95%; 3. Time: 48±2 Hours		
High Temperature Load Life Test	There should be no evidence of	 Temp: 85°C±2°C; 2. Time: 96±12 Hours; Load: Allowed DC Current 		
Low Temperature Load Life Test	short or open circuit	 Temp: -40°C±2°C; 2. Time: 96±12 Hours; Load: Allowed DC Current 		

Note: Storage Temperature: 25±3°C; Humidity:<80%RH



How to Order



• Part Number: TCPWCH05, TCPWCH06

Shielding Type

Code	Shielding Type
Н	Shielding

Oimensions (L×W) (mm)

Code	Dimensions(L×W)	EIA
05	2.10×1.20	EIA0805
06	3.20×1.50	1206

S Packaging	
Code	Packaging
TR	Taping Reel
р	Bulk

6 Impedance

Code	Impedance
900	90Ω
121	120Ω
102	1000Ω
222	2200Ω

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