

# APPROVAL SHEET



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WQCF2012 Series\_V1.0\_Auto

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## Features

- 1. Wire wound type common mode choke.
- 2. Excellent solderability.
- 3. AEC-Q200

# Applications

- 1. USB line for personal computers and peripheral.
- 2. USB 2.0 \ IEEE1394 \ LVDS.
- 3. Automotive

# **Shape and Dimension**

Unit: mm



WQ	CF	2012	ZO	М	670	Р	В
Product Code	Series	Dimensions	Series extension	Tolerance	Value	Packing Code	
WQ: Inductor AEC-Q200	COMMON MODE CHOKE	2.0 * 1.2 mm	Z0:STD	M: ± 20%	670 = 670HM 101 = 1000HM	P=7" Reeled (Embossed tape)	B:STD



## **Electrical Characteristics**

WQCF2012 Series	Z (OHM) @100MHz _±20%	DCR MAX. (Ω)	RATE CURRENT (mA)	Cut-off Frequency (GHz) TYP.	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	Insulation Resistance @125VDC (MOHM) MIN.
WQCF2012Z0M670PB	67	0.25	400				
WQCF2012Z0M750PB	75	0.30	400				
WQCF2012Z0M900PB	90	0.35	330				
WQCF2012Z0M101PB	100	0.35	330				
WQCF2012Z0M121PB	120	0.30	370				
WQCF2012Z0M161PB	160	0.35	350				
WQCF2012Z0M181PB	180	0.35	330				
WQCF2012Z0M201PB	200	0.40	300	1.0	50	125	10
WQCF2012Z0M221PB	220	0.40	300				
WQCF2012Z0M261PB	260	0.40	300				
WQCF2012Z0M361PB	360	0.50	斤有300 /	This			
WQCF2012Z0M371PB	370	0.45	2804	AT I			
WQCF2012Z0M431PB	430	0.55	280	\$\$_\\$}			
WQCF2012Z0M601PB	600	0.60	240				
WQCF2012Z0M751PB	750	0.90	P 220 A	LED I			

#### **TEST INSTRUMENT**

Z Test by Agilent4291B+16197A DCR Test by Zentech502BC Insulation Resistance Test by Agilent 4338B

OPERATING TEMPERATURE RANGE: -40℃ ~ +125℃



# TYPICAL IMPEDANCE VS FREQUENCY



Frequency (MHz)





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### **RELIABILITY PERFORMANCE**

Test Item	Standard Source	
High Temperature1000 hrs. at rated operating temperature (e.g. 125°C part can be stored for 1000 hrs. @ 125°C. Same applies for 105°C and 85°C. Unpowered. Measurement at 24±4 hours after test conclusion.		MIL-STD-202 Method 108
Temperature Cycling	1000 cycles (-40°C to +125°C). Note: If 85°C part o r 105°C part the 1000 cycles will be at that temperature. Measurement at 24±4 hours after test conclusion. 30min maximum dwell time at each temperature extreme. 1 min. maximum transition time.	JESD22 Method JA-104
Biased Humidity	1000 hours 85℃/85%RH. Unpowered. Measurement at 24±4 hours after test conclusion.	MIL-STD-202 Method 103
Operational Life	1000 hrs. @ 105℃. If 85℃ or 125℃ part will be te sted at that temperature. Measurement at 24±4 hours after test conclusion.	MIL-PRF-27
Mechanical Shock	Method213.ConditionC,Peak Value:100g's, Duration:6ms, Waveform:Half-sineVelocity Change:12.3ft/sec	MIL-STD-202 Method 213
Vibration	5g's for 20 minutes, 12 cycles each of 3 orientations. Note: Use 8"X5" PCB, .031" thick, 7 secure points on one long side and 2 secure points at corners of opposite sides. Parts mounted within 2" from any secure point. Test from 10-2000 Hz.	MIL-STD-202 Method 204
Resistance to Soldering Heat	Condition B No pre-heat of samples. Note: Single Wave Solder - Procedure 2 for SMD and Procedure 1 for Leaded with solder within 1.5mm of device body.	MIL-STD-202 Method 210
ESD	Passive Component Human Body Model (HBM) Electrostatic Discharge (ESD) Test. Only direct contact discharge, record the voltage value what the sample can pass.	AEC-Q200-002 Or ISO/DIS10605
Solderability	For both Leaded & SMD. Electrical Test not required. Magnification 50X. Conditions: Leaded: Method A @ 235°C, category 3. SMD: a) Method B, 4 hrs @ 155°C dry heat @ 235°C b) Method B @ 215°C category 3. c) Method D category 3 @ 260°C.	J-STD-002
Flammability	V-0 or V-1 Acceptable	UL-94
Board Flex	60 sec minimum holding time.	AEC-Q200-005
Terminal Strength (SMD)	Force of 900g for 60 seconds.	AEC-Q200-006

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# Tape & Reel Packaging Dimensions:



#### UNIT : mm

	А	В	С	D	Ν	Р	W	t
DIM.	178	13.0	8.4	12.5	75	4.0	8.00	0.24
TOL.	±2.0	±0.8	+1.0-0	MAX	±1.5	±0.10	±0.20	±0.01

Quantity per reel : 2K pcs