

APPROVAL SHEET



WQCF2012FH Series
COMMON MODE CHOKE
AEC-Q200

*Contents in this sheet are subject to change without prior notice.

Features

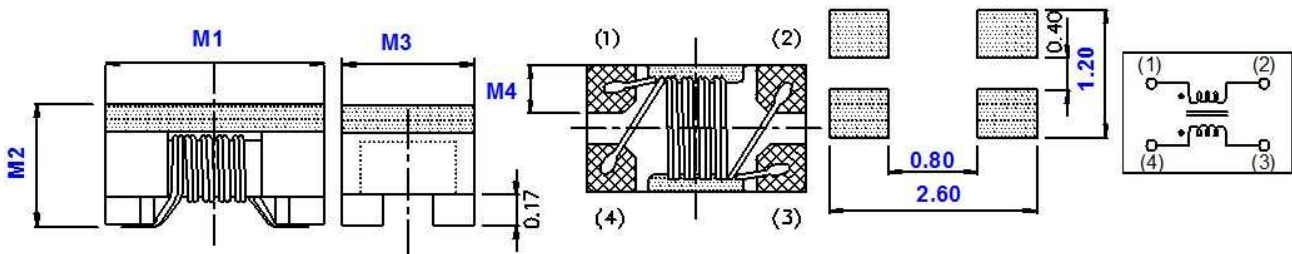
1. Wire wound type common mode choke.
2. Excellent solderability.
3. AEC-Q200

Applications

1. HDMI
2. DVI 、 Digital TVs 、 DVD recorders and LVDS.
3. Automotive

Shape and Dimension

Unit: mm



SERIES	M1	M2	M3	M4
WQCF2012FH	2.0±0.2	1.20±0.2	1.20±0.2	0.40(TYP.)

Ordering Information

WQ	CF	2012	FH	M	670	P	B
Product Code	Series	Dimensions	Series extension	Tolerance	Value	Packing Code	
WQ: Inductor AEC-Q200	COMMON MODE CHOKE	2.0 * 1.2 mm	FH	M: ± 20%	670 = 67OHM 120 = 120OHM	P=7" Reeled (Embossed tape)	B:STD

Electrical Characteristics

WQCF2012FH Series	Z (OHM) @100MHz ±20%	DCR MAX. (Ω)	RATE CURRENT (mA)	Cut-off Frequency (GHz) TYP.	Rated Voltage (Vdc)	Insulation Resistance (MOHM) MIN.
WQCF2012FHM670PB	67	0.25	400	6	50	10
WQCF2012FHM900PB	90	0.30	370			
WQCF2012FHM121PB	120	0.35	330			

TEST INSTRUMENT

Z Tested by Agilent4291B+16193A

DCR Tested by Zentech502BC

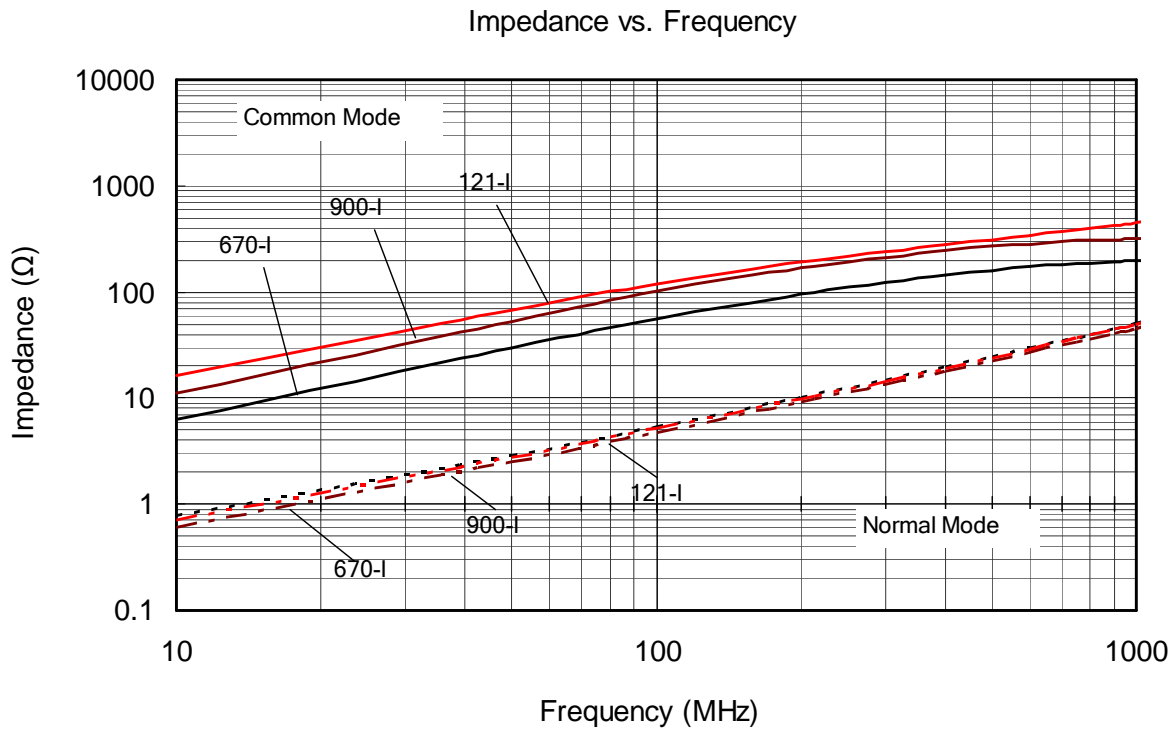
Insulation Resistance Tested by Agilent 4338B

Operating Temperature Range: -40°C ~ +125°C

※MSL:LEVEL 1

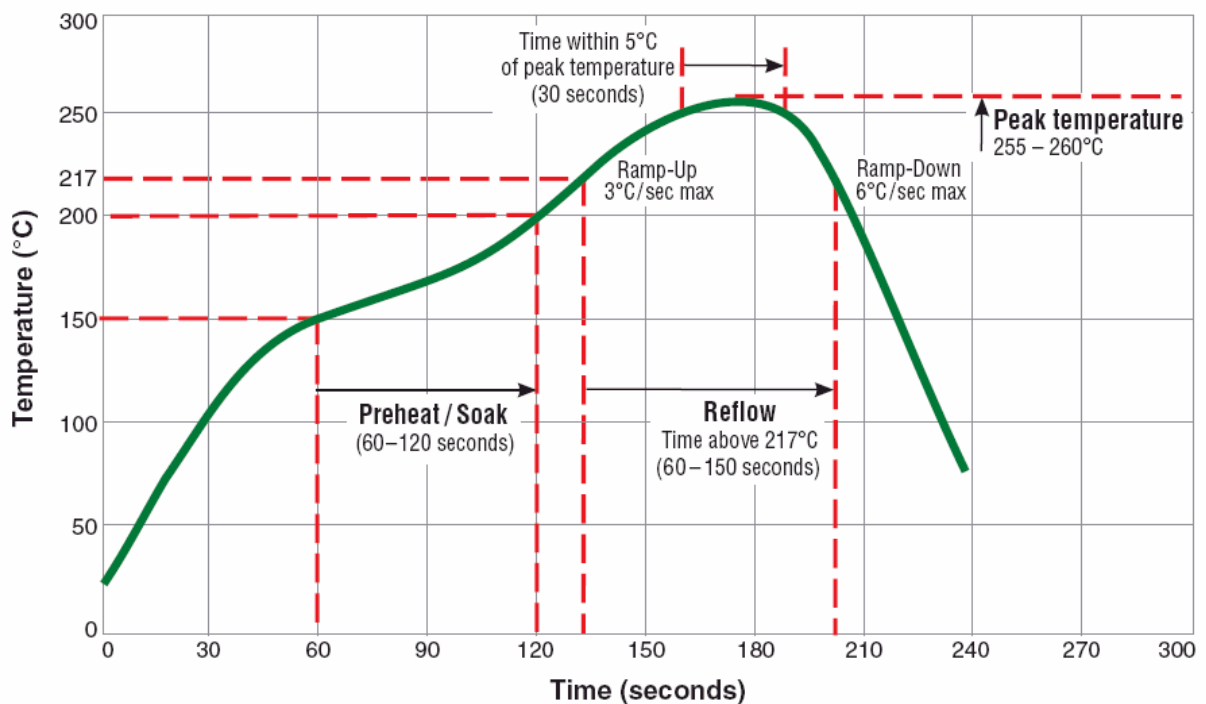


TYPICAL IMPEDANCE VS FREQUENCY



TYPICAL RoHS REFLOW PROFILE

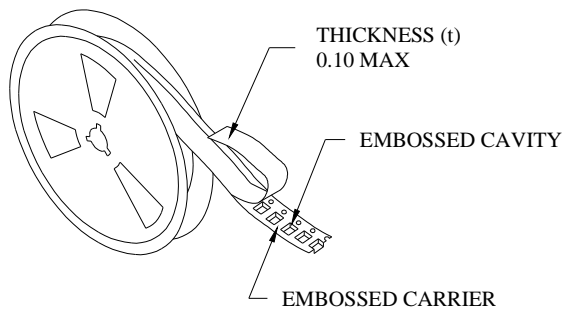
Typical RoHS Reflow Profile



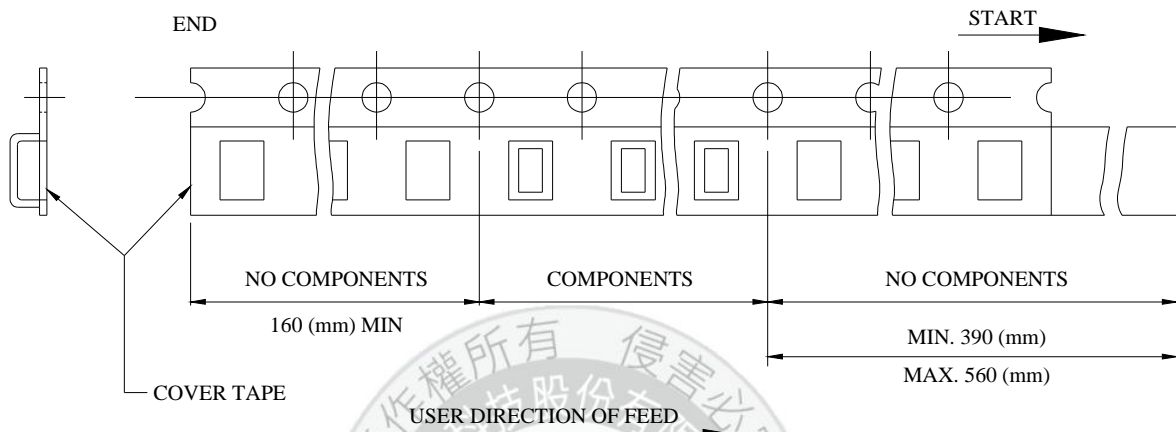
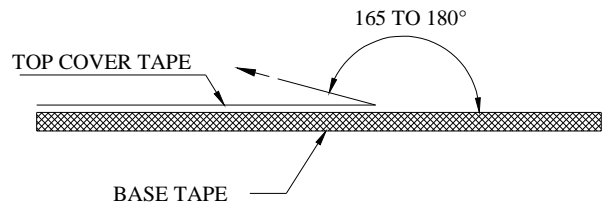
RELIABILITY PERFORMANCE

Test Item	Test Condition	Standard Source
High Temperature Exposure (Storage)	1000 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 or 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°C/85%RH. Unpowered. Measurement at 24±4 hours after test conclusion.	MIL-STD-202 Method 103
Operational Life	1000 hrs. @ 105°C. If 85°C or 125°C part will be tested at that temperature. Measurement at 24±4 hours after test conclusion.	MIL-PRF-27
Mechanical Shock	Method 213. Condition C, Peak Value: 100g's, Duration: 6ms, Waveform: Half-sine Velocity 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

Tape & Reel Packaging Dimensions:

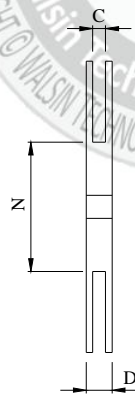
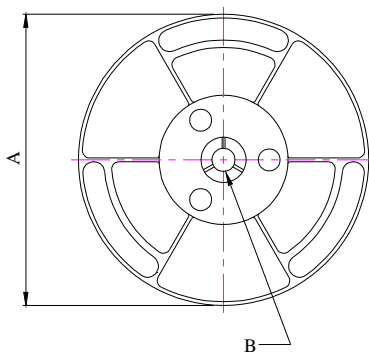


- THE FORCE FOR TEARING OFF COVER TAPE IS 10 TO 100 GRAMS IN THE ARROW DIRECTION.

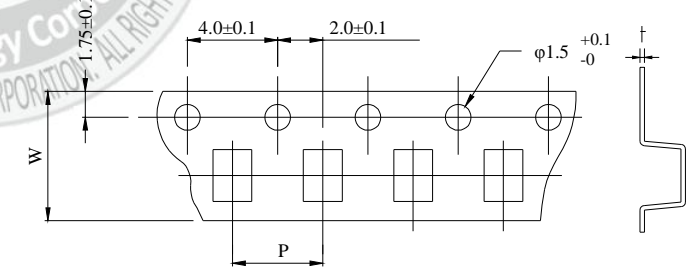


■ CARRIER TAPE REELS (mm)

MATERIAL: PLASTIC



■ DIMENSIONS OF CARRIER TAPE (mm)



UNIT : mm

	A	B	C	D	N	P	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