

NAKAGAWA ELECTRONICS LIMITED

Block A, Unit 1-2, 7/F., Hoi Luen Ind. Centre 55 Hoi Yuen Road, Kwun Tong, Kowloon, Hongkong PRINTED: 2020-04-09

END OF LIFE ANNOUNCEMENT (EOL)

То:	Our valued customers			
Attention:	Purchasing, Engineering, QA / QC			
Customer P/N:	Any equivalent to below listed NKG thru-hole Ceramic Filter families			
NKG P/N:	All PNs of LT and LTS families			
EOL Date:	2020-10-01			

To whom it may concern,

We regret that we have to announce that effective by April 9th 2020 our THRU-HOLE CERAMIC FILTERRS will be in preparation for shutdown of the production line. The permanent market shrinkage over the past years had been leading into very few orders that do not justify a cost effective production anymore. Also the fact that most customers prefer SMD type components today, we recommend to switch to one of our SMD Ceramic Filters for future use. In the table below are suitable models given, other available model can be found on our website. It is needed that customer makes modification on the PCB when changing from thru-hole to SMD device.

	Current thru-hole PN family to be EOL	Frequency	SMD replacement PN family	
1	LT	10.700MHz	None	
2	LTS	2.300~6.500MHz	LTCS	

Please check our website for the sheets introducing the SMD replacement parts. http://nkg.com.hk/ceramic.php

The EOL is in preparation, the PNs that had been ordered in past year by customers being supported for another half year, orders that are being received until September for frequencies listed here below, will be processed.

LT10.7MS2	LT10.7MS3	LT10.7MA5	
LT10.7MHY	LT10.7MJA10	LTS6.5MCB	

Kindly contact our sales team for more information, for equivalent specification sheets and eventual upcoming sample requests.

1~iF2	For and on behalf of NAKAGAWA ELECTRONICS LTD.	
	N.C. Wong M. C. D.	2020-04-09
	President NKG 董事长	Date
General Product spec	ification of LTS series	RevC
NK-FOL Apr	Douncement LTx THD 200409	Page 1 of
		N.C. Wong. M. C. Wong. M. Wong. M. C. Won

CERAMIC FILTER UNIT IN RESIN THRU-HOLE PACKAGE,

SIZE 10 X 8MM.

CERAMIC FILTERS

PRODUCT FEATURES

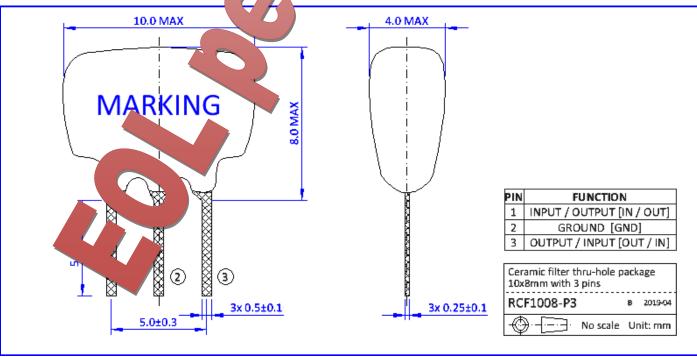
- RESIN THRU-HOLE CASE IN WIDTH 10 x 8 x 4MM WITH 3 LEADS.
- MULTIPLE FREQUENCIES WITH DIFFERENT BANDWIDTH AND INSERTION LOSS.

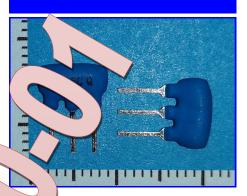
APPLICATIONS

• RADIO APPLICATIONS

PRODUCT SPECIFICATIONS				
Parameter	SYMBOL		REMARKS	
FREQUENCY RANGE	F _N	2.3 ~ 6.5MHz	NOTE 1	
Bandwidth @3dB	BW ₃	±70ĸHz 125r		
Bandwidth @20dB (MAX)	BW ₂₀	±650кН R ±0 чz	SEE PART NUMBER LIST ON NEXT PAGE FOR	
INSERTION LOSS (MAX)	IL	Ou	DETAILS.	
SPURIOUS ATTENUATION (MIN)	SP	25 OdB		
INPUT / OUTPUT IMPEDANCE	Z _{IN} / Z _{OUT}		-	
TEMPERATURE CHARACTERISTICS	T _c	OOPP C	Over operating temperature range	
OPERATING TEMPERATURE RANGE	T _{OP}	–25 +85°C	—	
WITHSTANDING VOLTAGE	Uw	DC	For 1 minute maximal	
NOTE 1: TYPICAL FREQUENCIES: 2.3MHz, 2.8MHz, 3.2MHz, 3.8 4.5N 6.5M 4.7				

MECHANICAL DIMENSIONS







LTS

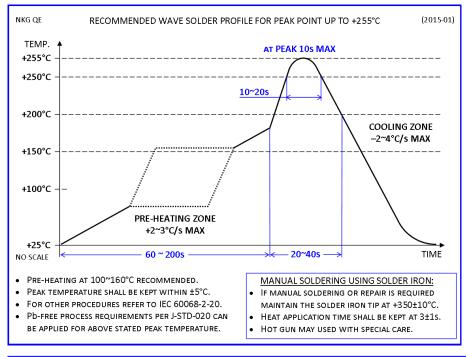


CERAMIC FILTER UNIT IN RESIN THRU-HOLE PACKAGE, SIZE 10 X 8MM.

ENVIRONMENTAL COMPLIANCE INFORMATION

- ROHS 5/6 COMPLIANT (DIRECTIVE 2011/65/EC).
- COMPLIANT TO ROHS 2 (DIRECTIVE 2015/863) (ALSO CALLED ROHS 10).
- HALOGEN-FREE PER DEFINITION OF IEC 61249-2-21 2033. •
- COMPLIANCE TO THE LISTED SVHCS BY REACH IS NOT GIVEN ANYMORE SINCE • LEAD AND LEAD COMPOUNDS HAD BEEN ADDED TO THE LIST OF SVHCS.
- PRODUCT DOES NOT CONTAIN ANY PHTHALATES (PHS). •
- PRODUCT DOES NOT CONTAIN PVC (POLYVINYL CHLORIDE). •
- PRODUCT DOES NOT CONTAIN PFOS/PFOA NOR BEING SAME USED TO • MANUFACTURE THE COMPONENTS OF THIS PRODUCT.
- MOISTURE SENSITIVITY LEVEL (MSL) 1 PER J-STD-020C.

SOLDERING RECOMMONDATIONS



PART NUMBER SYNTAX

PART NUMBER FAMILY (GROUP INDICATOR F	OR CERAMIC FILTER UNITS)	
PART NUMBER FAMILY (MODEL INDICATOR F	REPRESENTING PACKAGE TYPE AND SIZE)	·
NOMINAL FREQUENCY (IN MHZ WITH ONE D	IGIT AFTER DECIMAL POINT FOLLOWED BY "M")	
TYPE CODE (REPRESENTING VIBRATION MODE AN	ID CERTAIN ELECTRICAL PARAMETER CONFIGURATIONS)]
		FOR MORE INFORMATION PLEASE CONTACT US.
HONG KONG: NAKAGAWA ELECTRONICS LIMITED The sales@nkg.com.hk + +852 2341 0001 💽 www.nkg.com.hk	China Shenzhen office: 深圳中川晶体电子有限公司 會 +86(0)755 2598 2648	China Suzhou office: 苏州纳美电子有限公司 ☎ +86(0)512 8818 7890
	2020 / 04	PAGE 3 (511
NKG-GPS_LTS_RevC	2020 / 04	6511

LTS



PACKAGING INFORMATION

BULK PACKAGING

٠

- QTY PER BAG: 500PCS
- QTY PER BOX: 1,500PCS

ITC2 2NA FR

.com.hk PAGE 3



CERAMIC FILTER UNIT IN RESIN THRU-HOLE PACKAGE, SIZE 10 X 8MM.

LTS

LIST OF AVAILABLE PART NUMBERS

PN	Frequency [MHz]	Bandwidth @3dB	BANDWIDTH @20dB	INSERTION LOSS (MAX)	SPURIOUS ATTENUATION (MIN)
LTS2.3MEB	2.300	±70κHz	±800кНz	6dB	25dB
LTS2.8MEB	2.800	±70κHz	±800кНz	6dB	25dB
LTS3.2MEB	3.200	±70κHz	±800кНz	6dB	25dB
LTS3.8MEB	3.800	±70κHz	±800кНz	6dB	25dB
LTS4.5MEB	4.500	±125кНz	±800кНz	6dB	25dB
LTS6.5MCB	6.500	±70кHz	±650кНz	6dB	30dB

Note 1: Parameter limits at +25°C and in test circuit as shown below.

TEST CIRCUIT

