

Common Mode Filter 2 Line 12~90 Ω 100mA

SIC2-TCI Series

MERITEK

FEATURE

- Operating Temperature: -25°C ~ +85°C
- Thin film common mode filter
- Suppresses noise for high speed differential data lines
- Applications: Display Port, e-SATA, USB 2.0, USB 3.0, IEEE 1394, LVDS, DVI, HDMI, MIPI, and MHL.USB3.1



PART NUMBERING SYSTEM

SIC 2 2 12RJ A1 TCI
(1) (2) (3) (4) (5) (6)

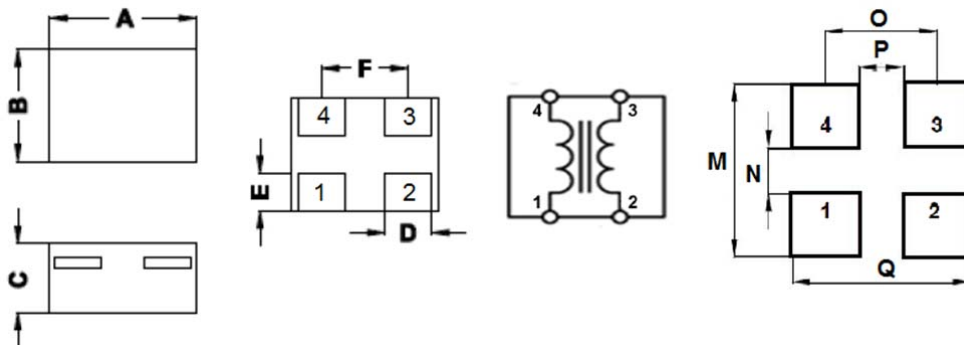


No	Item	Code	Description	Series Reference
(1)	Meritek Series	SIC	Common Mode Filter series	2 Line Thin Film Type
(2)	Dimension Code	2	2: 0.85x0.65mm	WidthxLength
(3)	Line	2	2: 2 Lines	Number of Lines
(4)	Impedance/Tolerance	12RJ	12RJ: 12Ω ±5Ω	90RN: 90 Ω ±25%, M: ±20%, Z: -10/+15Ω
(5)	Rated Current	A1	A1:100mA	Max Rated Current
(6)	Internal Code	TCI	Internal Control Code	Internal or Project Reference

ELECTRICAL CHARACTERISTICS

Part Number	Impedance @100MHz (Ω)	Tolerance (Ω, %)	Max DC Resistance (Ω)	Max Rated Current (mA)	Rated Voltage (V)	Insulation Resistance (MΩ) Min.	Cut off Frequency (GHz)
SIC2212RJA1TCI	12	±5Ω	2.00	100	5	10	10
SIC2235RZA1TCI	35	-10/+15Ω	2.00	100	5	10	5
SIC2265RMA1TCI	65	±20%	3.30	100	5	10	3
SIC2290RNA1TCI	90	±25%	2.7(Typ.)	100	5	10	3

DIMENSIONS AND PCD LAND LAYOUT



Series	A	B	C	D	E	F	M	N	O	P	Q
SIC2-TCI	±0.05	±0.05	±0.05	±0.1	±0.1	±0.1	M	N	O	P	Q
SIC2-TCI	0.85	0.65	0.4	0.27	0.2	0.5	0.77	0.2	0.5	0.2	0.8

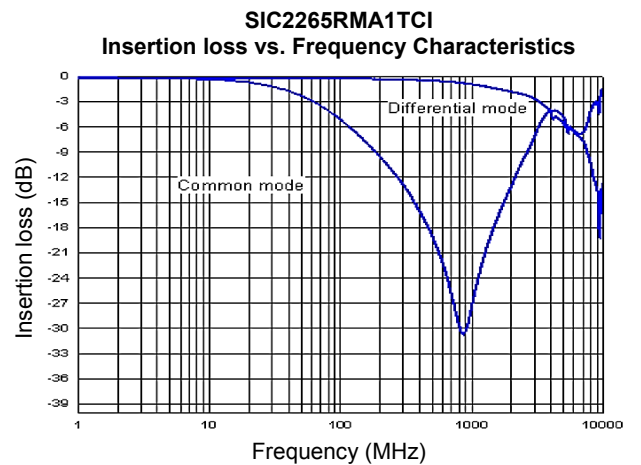
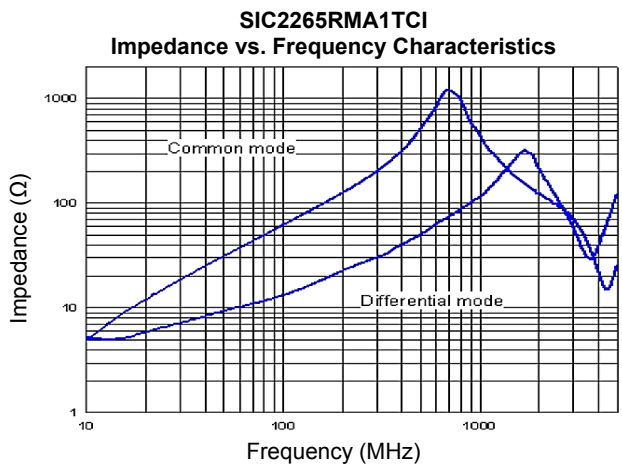
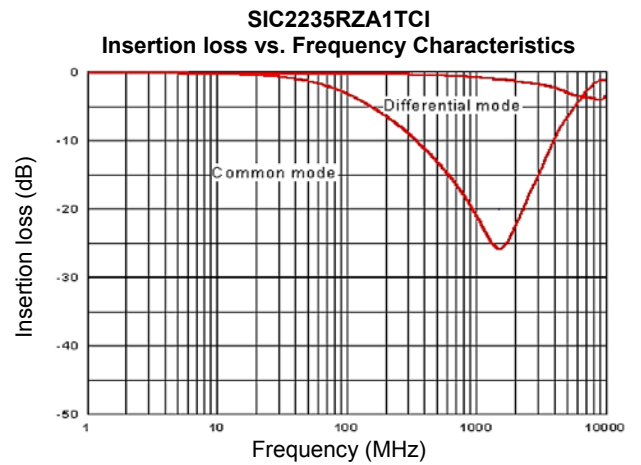
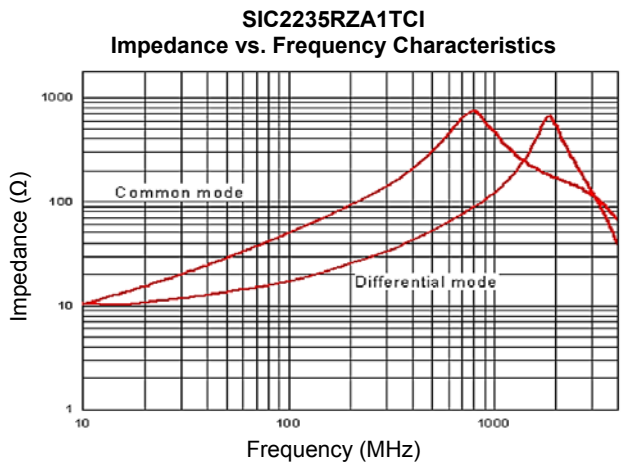
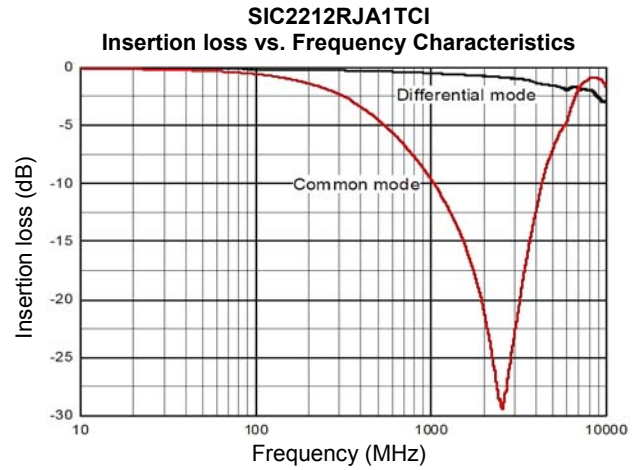
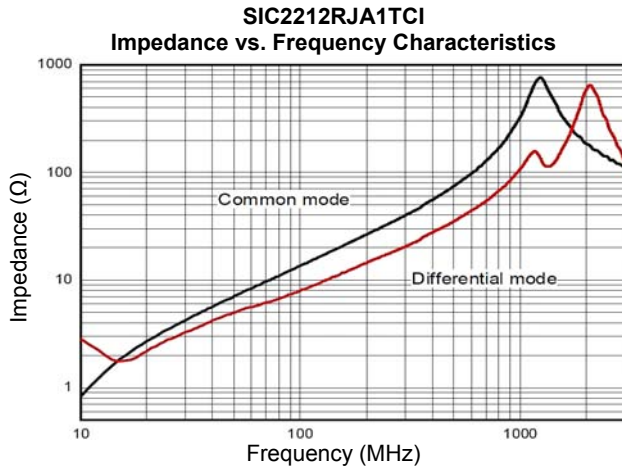
Unit: mm

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CHARACTERISTIC CURVES

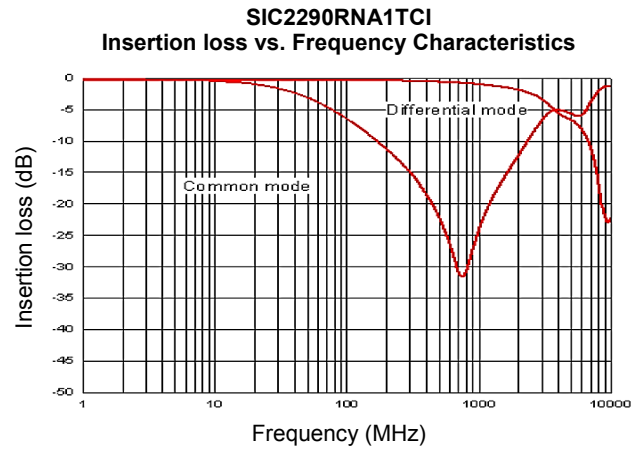
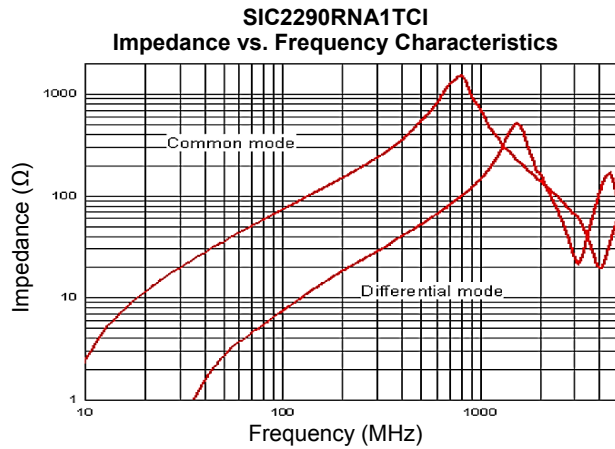


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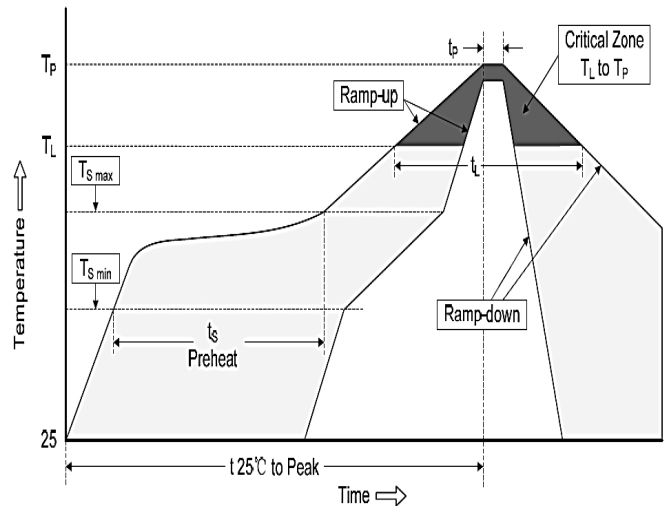
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CHARACTERISTIC CURVES



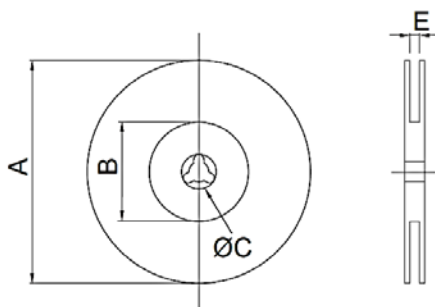
RECOMMENDED SOLDERING PROFILES

Reflow Condition		
Pre Heat	Temp. Min $T_{s(min)}$	140°C
	Temp. Max $T_{s(max)}$	160°C
	Time (min. to max.) (t_s)	60~120 seconds
Average ramp up rate (T_L) to peak		3°C/second Max.
$T_{s(max)}$ to T_L (Ramp-up rate)		3°C/second Max.
Reflow	Temp. (T_L)	200°C Min.
	Time (min. to max.) (t_L)	20~40 seconds
Peak Temperature (T_P)		220~260°C
Time within 5°C of actual peak Temperature (t_p)		≥30 seconds
Ramp-down Rate		4°C/second Max.
Time (25°C to Peak Temp.)		6 mins Max.

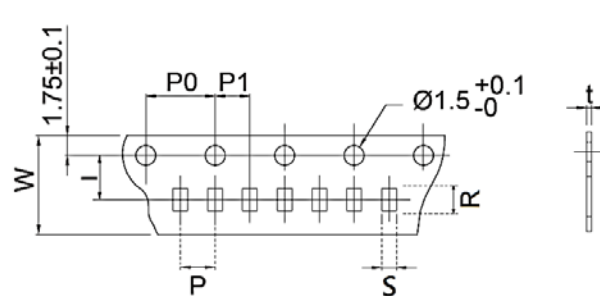


PACKAGING SPECIFICATION

CARRIER TAPE REELS



TAPE DIMENSION (mm)



Series	Reel Dimension (mm)				Tape Dimensions (mm)					Parts Per Reel
	A ±2.0	B ±1.5	C ±0.8	E ±0.5	W ±0.10	P ±0.05	P0 ±0.10	P1 ±0.05	t ±0.03	
SIC1-TCI	178.0	62.0	21.0	9.0	8.00	2.00	4.00	2.00	0.42	10,000
SIC2-TCI	178.0	62.0	21.0	9.0	8.00	2.00	4.00	2.00	0.60	10,000

*Specifications subject to change without notice.