

DESCRIPTION

Ceramic Discriminators LT10.7M for FM are resonated devices that offer adjustment free audio detection in both wide and narrow bandwidths. These IC dependent devices utilize FM specific detection methods to convert changes in frequency into an intelligible audio signal.

ELECTRICAL SPECIFICATION (for FM-IF) Table 1

Part Number	Center Frequency in MHz	3dB Bandwidth in kHz	20dB Bandwidth in kHz	Insertion Loss in dB	Espurious Attenuation in dB
LT10.7MA5-A	10.7 ± 0.03	280 + 50	≤ 650	≤ 6	≥ 30
LT10.7MS2-A	10.7 ± 0.03	230 + 50	≤ 600	≤ 6	≥ 40
LT10.7MS3-A	10.7 ± 0.03	180 + 40	≤ 520	≤ 7	≥ 40
LT10.7MJ-A	10.7 ± 0.03	150 + 40	≤ 400	≤ 10	≥ 35

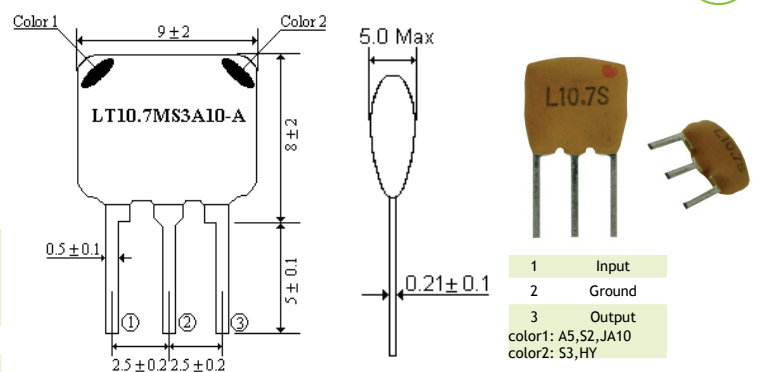
Input/Output Impedance: 330 Ohms

ELECTRICAL SPECIFICATION (Low Loss Type) Table 2

Part Number	Center Frequency in MHz	3dB Bandwidth in kHz	20dB Bandwidth in kHz	Insertion Loss in dB	Espurious Attenuation in dB
LT10.7MA5A10-A	10.7 ± 0.03	280±50	≤ 590	2.5 + 2.0	≥ 30
LT10.7MS2A10-A	10.7 ± 0.03	230±50	≤ 520	3.0 + 2.0	≥ 35
LT10.7MS3A10-A	10.7 ± 0.03	180±40	≤ 470	3.5 + 1.5	≥ 35
LT10.7MJA10-A	10.7 ± 0.03	150±40	≤ 360	4.5 + 2.5	≥ 35
LT10.52MJA10-A	10.7 ± 0.03	150±40	≤ 360	4.5 + 2.5	≥ 35

Input/Output Impedance: 330 Ohms

MECHANICAL DIMENSIONS (all in mm)



ELECTRICAL SPECIFICATION (for BDS Receiver) Table 3

Part Number	Center Frequency in MHz	3dB Bandwidth in kHz	20dB Bandwidth in kHz	Insertion Loss in dB	Espurious Attenuation in dB
LT10.7MA19-A	10.7 ± 0.03	≥ 350	≤ 950	3.0 ± 2.0	≥ 20
LT10.7MA20-A	10.7 ± 0.03	330±50	≤ 680	4.0 ± 2.0	≥ 30

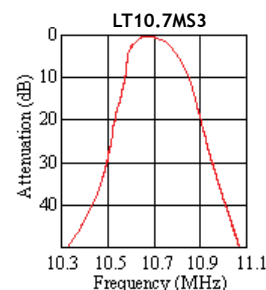
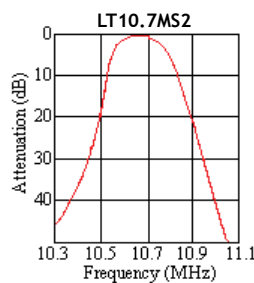
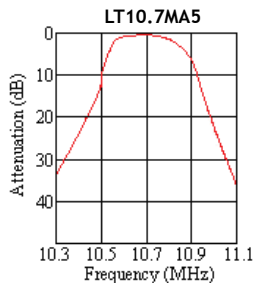
Input/Output Impedance: 470Ω(MA19), 330Ω(MA20, MHY), 600Ω(MFP)

ELECTRICAL SPECIFICATION (Narrow Band Type) Table 4

Part Number	Center Frequency in MHz	3dB Bandwidth in kHz	20dB Bandwidth in kHz	Insertion Loss in dB	Espurious Attenuation in dB
LT10.7MFP	10.7 ± 0.03	≥ 20	≤ 95	≤ 6	≥ 24

Input/Output Impedance: 470Ω(MA19), 330Ω(MA20, MHY), 600Ω(MFP)

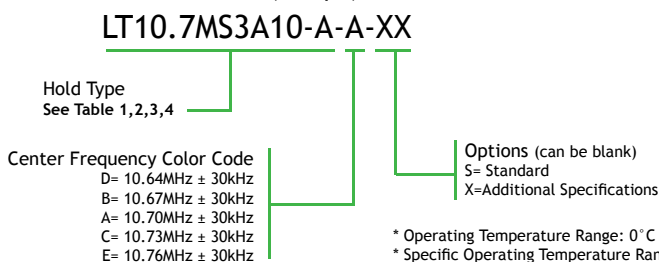
LT10.7M CHARACTERISTICS



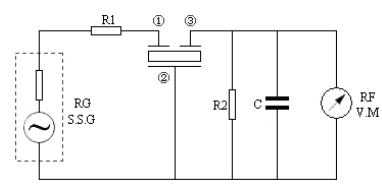
LT10.7M Standard Marking Color - Table 5

Center Frequency	Color
D: 10.64MHz + 30KHz	Black
B: 10.67MHz + 30KHz	Blue
A: 10.70MHz + 30KHz	Red
C: 10.73MHz + 30KHz	Orange
E: 10.76MHz + 30KHz	White

PART NUMBERING SYSTEM (Example)



TEST CIRCUIT JT10.7MG18



Rg + R1 = R2 = 330 Ohms C = 10pF

Including stray capacitance and input capacitance of RF voltmeter