

Version:
February 28, 2017

DIRECT

Electronics Tech.

(JTCV10.7M) SMD Ceramic Discriminator

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▶ Product Introduction

Introduction (JTCV10.7M)

Features :

- High sensitivity and stability.
- Small in size and light weight.
- Wide range of standard products are available for various ICs.

Characteristics :

- Center Frequency: 10.7MHz.
- Storage temperature range: -40°C to +85°C.
- Operating temperature range: -20°C to +80°C.
- Dimensions: (3.7±0.2 × 3.1±0.2 × 1.4±0.2) Unit: mm.
- Available IC: CX-2009, CX-20111, CXA1019M, CX-20091, μPC1028H, LA1150, TA7303P, TA7130, TA8122AN, TA8132N, TA2007, TA2104AFN, TA2099N, TA2132P.

Direct offers compact low-cost low power processor SMD ceramic discriminator for FM. Direct takes advantages of SMD ceramic discriminators which convert the changes in frequency into an audio signal via the various detection methods based on impedance or phase characteristics of piezoelectric technology. The incorporation of piezoelectric technology allows the product's function and feature set to be easily configured via surface mount installation.

The discriminator functions to convert the change of the frequency into audio frequency, and unique system of detection only used for FM broadcasting. The detection of FM wave is made through the circuit in which the relation between the frequency and the output voltage is linear. FM wave detection methods, such as ratio detection, Foster-Seeley detection, quadrature detection, differential peak detection, etc. are known.

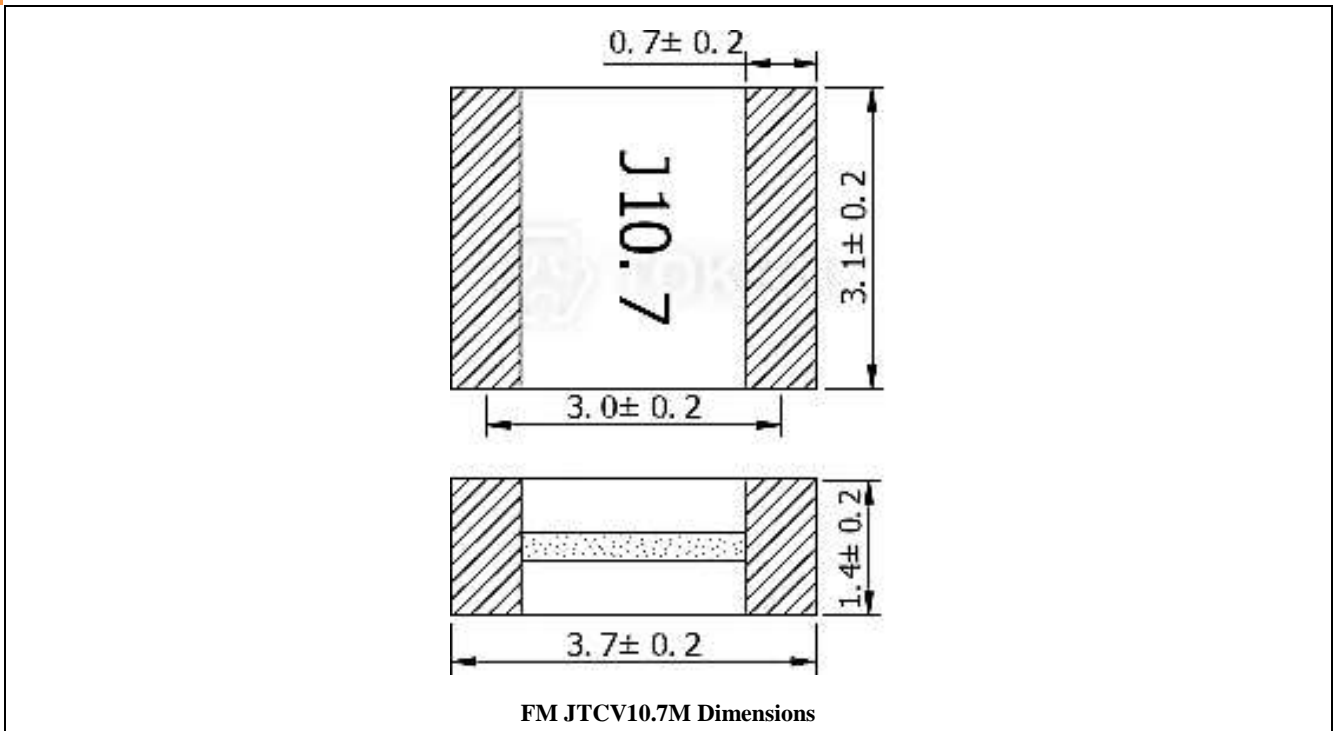
Surface mount ceramic discriminators (JTCV10.7M) for FM are resonated devices that offer adjustment free audio detection in both wide and narrow bandwidths. These IC dependent devices utilize FM specific detection methods to convert changes in frequency into an intelligible audio signal.

Custom parts are available on request. Direct will also produce devices outside these specifications to meet specific customer requirements, contact us with your specific needs. For more information, please link to Direct official website "[Ceramic Discriminator](#)".



Dimensions

Dimensions (Unit: mm) (JTCV10.7M)



Technical Characteristics

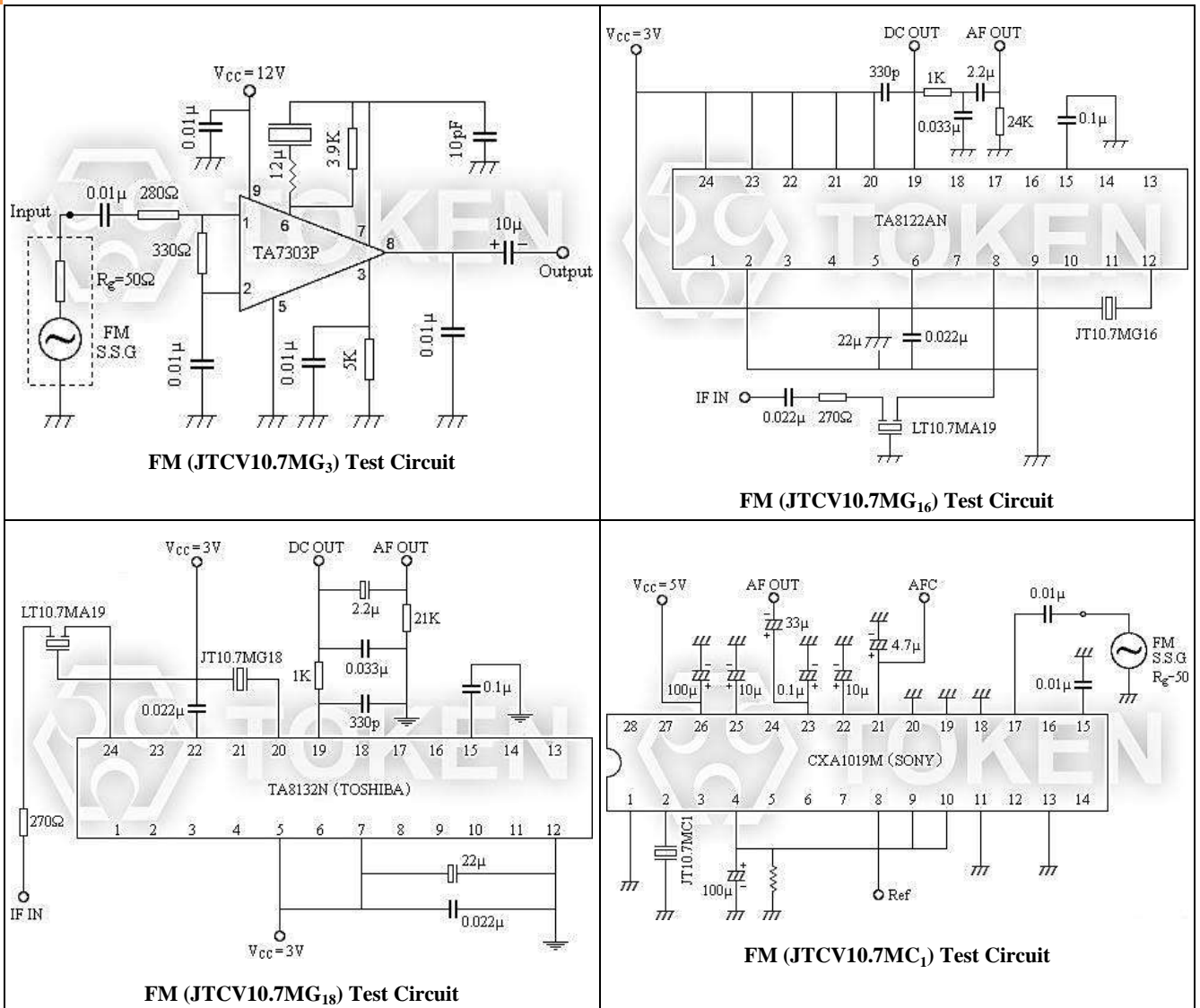
Technical Characteristics (JTCV10.7M)

Part Number	Demodulation Output at fo (mv) min	Distortion Factor at fo (%) max	Demodulation 3dB Band Width (KHz) max	Applicable IC
JTCV10.7MG1	25	1.0	345	CX-2009, CX-20111
JTCV10.7MG3	650	1.0	±150	TA7303P, TA7130, μPC1028H, LA1150
JTCV10.7MG16	60~90	0.9	300	TA8122AN
JTCV10.7MG18	60~90	0.9	300	TA8132N
JTCV10.7MG33	45	0.7	250	TA2007
JTCV10.7MG80	65	1.0	300	TA2104AFN
JTCV10.7MG82	90	0.8	320	TA2099N
JTCV10.7MG92	60	1.0	300	TA2132P
JTCV10.7MC1	35	1.0	242	CXA1019M, CX-20091



▶ **Test Circuit**

Test Circuit (JTCV10.7M)



▶ **Order Codes**

Order Codes (JTCV10.7M)

JTCV10.7MG3	TR
Part Number	Package (TR: Taping Reel)



▶ **General Information**

Advantage of Direct Piezoelectric Ceramics

Direct Electronics had been able to develop specialized piezo materials which when combined with an advance design have resulted in a complete line of practical, inexpensive piezo devices for entertainment and communications applications.

Direct reliably deliver high-quality components according to the each customer special needs with respect to performance, costs, and technology modifications.

For marketing discontinuations or sourcing activities concerning Piezoelectric **Discriminator** products, you are encouraged to contact our Sales Department so the request can be properly directed within Direct.

