

TF310 Series Crystal



- 3 x 8mm, 3 x 8.5mm, 3 x 10mm Cylindrical
- AT Strip Cylindrical Crystal
- RoHS Compliant
- Thru-Hole Device



Frequency Range	3.579545MHz to 65.000MHz
Frequency Tolerance / Stability	(See Part Number Guide for Options)
Operating Temperature Range	(See Part Number Guide for Options)
Storage Temperature	-40°C to +85°C
Aging	±5ppm per first year Maximum
Shunt Capacitance	5pF Maximum
Load Capacitance	(See Part Number Guide for Options)
Equivalent Series Resistance (ESR)	See ESR Chart
Mode of Operation	Fundamental or 3 rd OT
Drive Level	100µW Maximum
Insulation Resistance	500 Megaohms Minimum at 100VDC ±15VDC

Environmental & Mechanical Detail

Shock	MIL-STD-883, Method 2002 Cond B
Solderability	MIL-STD-883, Method 2003
Solvent Resistance	MIL-STD-202, Method 215
Vibration	MIL-STD-883, Method 2007, Cond A
Gross Leak Test	MIL-STD-883, Method 1014, Cond C
Fine Leak Test	MIL-STD-883, Method 1014, Cond A2
MSL	Level 1 per IPC/JEDEC J-STD 20

Marking Detail

Line 1 = Frequency

**QUALITY SYSTEM
CERTIFIED
= ISO 9001 =**

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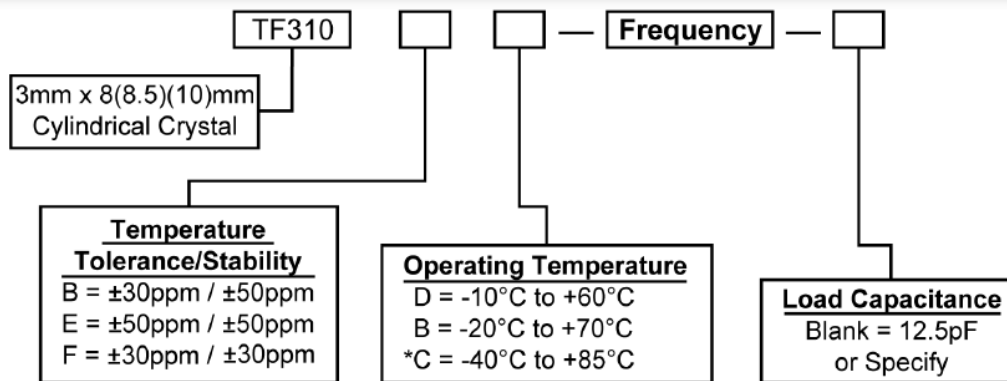


Revision: TF310042418E

ESR Chart

Frequency Range	ESR (Ohms)	Mode / Cut
3.57954MHz to 5.299MHz	150 Max	Fund / AT
5.500MHz to 5.999MHz	100 Max	Fund / AT
6.000MHz to 9.999MHz	80 Max	Fund / AT
10.000MHz to 11.999MHz	60 Max	Fund / AT
12.000MHz to 15.999MHz	50 Max	Fund / AT
16.000MHz to 36.000MHz	40 Max	Fund / AT
26.000MHz to 36.000MHz	100 Max	3 rd OT/AT
36.000MHz to 65.000MHz	80 Max	3 rd OT/AT

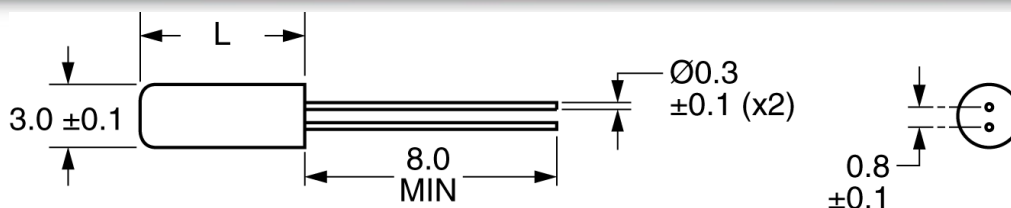
Part Number Guide



Please consult with MMD Sales Department for any other parameters or options.

*Not available for all frequencies

Mechanical Details



Frequency Range	"L" Dimension
3.57954MHz to 3.999MHz	10.0 ±0.2
4.000MHz to 5.999MHz	8.5 ±0.2
6.000MHz to 70MHz	8.0 ±0.2

All dimensions in millimeters

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