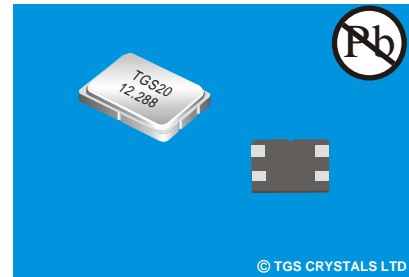


FEATURES

- Ultra Low Height ● 4 pads ● Tight Tolerance and Stability ● Lead Free available
- Dimension 7.0x5.0x1.2mm ● Tape & Reel ● Seam Weld Sealing

APPLICATIONS

- PCMCIA Applications ● Data Communications
- Telecommunications ● Automotive Electronics



SPECIFICATION *

Parameters	Product	Option Code
	SMD0705	CM75
Frequency Range:	8.000~70.0MHz	△ Specify
Oscillation Mode:	AT Fund. (8~20MHz)	△ A
	BT Fund. (12~40MHz)	△ B
	3rd OT (40~70MHz)	△ C
Frequency Tolerance:	±10ppm	△ 10
	±20ppm	△ 20
	±30ppm	△ 30
	±50ppm	▲ 50
	Other Values	△ Specify
Load Capacitance:	12pF	△ 12
	16pF	△ 16
	18pF	△ 18
	20pF	▲ 20
	30pF	△ 30
	Series Resonant Other Values	△ S △ Specify
Frequency Stability:	±10ppm	△ 10
	±20ppm	△ 20
	±30ppm	△ 30
	±50ppm	▲ 50
	Other Values	△ Specify
Operating Temp. Range:	0°C~+50°C	△ 0
	-10°C~+60°C	▲ 10
	-20°C~+70°C	△ 20
	-40°C~+85°C	△ 40
	Other Values	△ Specify
Storage Temp. Range:	-40°C~+85°C	▲
Equivalent Series Resistance (ESR):	See Table 1	△ Specify
Drive Level:	100 uW Max.	▲
Shunt Capacitance (C0):	7.0 pF Max.	▲
Aging:	±5ppm Max.	▲
Package:	Tape/Reel	△ T
Other Values:	Lead Free	△ LF

▲ Standard * Specifications Subject to Change Without Notice
 △ Optional: please specify required code when inquiring or ordering

PACKAGE

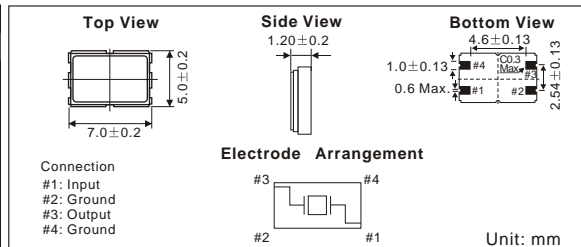
- Standard package in T/R: 1000pcs/Reel, 2Reel/ box, 5 box/carton
- See page 87 for detail dimensions

PART NUMBER GUIDE

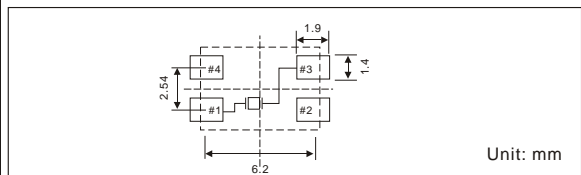
TGS	C	M	75	12M288	A	50	- 20	- 50	-10	- 50	- T
Mark	Quartz Crystals	SMD Type	7.0X5.0X1.2mm	Freq. Range	Oscillation Mode	Freq. Tolerance	Load Capacitance	Freq. Stability	Operating Temp. Range	ESR	Package

e.g. Full P/N.: TGS CM75 12M288A50-20-50-10-50T
 Short P/N.: CM75 12M288A20T (Others is standard Spec.)

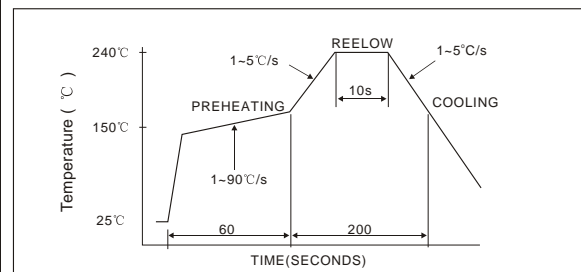
DIMENSIONS



RECOMMENDED SOLDER PAD LAYOUT



SOLDER REFLOW PROFILE



ESR VALUES

Table 1

Frequency Range (MHz)	ESR Max (ohm)	Frequency Range (MHz)	ESR Max (ohm)
8.0000 ~ 9.8000	80	13.0000 ~ 19.999	40
9.8300 ~ 9.9990	60	20.0000 ~ 23.999	40
10.0000 ~ 12.999	50	24.0000 ~ 70.0000	100

