



SMD2016 Quartz Crystal Units

■ FEATURES:

- Very Compact and thin(2.0×1.6mm typ.)
- Frequency range of 24MHz to 54MHz with FUND
- Mobilephone and bluetooth application
- Excellent heat resistance and shock resistance



■ SPECIFICATION:

Type	SMD2016
Frequency Range(F0)	24.00 to 54.00MHz
Vibration Mode	AT cut,Fundamental
Equivalent Series Resistance(Rs)	See Table NO. 1
Frequency Tolerance@ 25±3 °C(ΔF/F0)	±10 ~ ±50 PPM
Frequency Stability@TOPR (TC)	See Table NO. 2
Shunt Capacitance(C0)	3.0PF Max
Load Capacitance(CL)	8.0 ~ 16.0PF
Insulation Resistance(IR)	> 500MΩ at DC 100V±15V
Drive Level(DL)	50.0 ~ 100.0μW
Aging(Fa)	±2 ~ ±5PPM/Year

● Table NO.1: Equivalent Series Resistance(ESR) and Vibration Mode:

Frequency Range(MHz)	Vibration Mode	ESR(Ω)	Frequency Range(MHz)	Vibration Mode	ESR(Ω)
24.00 to 24.99	AT Fundamental	100	36.00 to 54.00	AT Fundamental	60
25.00 to 35.99	AT Fundamental	80			

● Table NO.2: Frequency Stability Over Operating Temperature Range:

Operating Temperature Range(TOPR)	Frequency Stability						
	±2.5PPM	±5 PPM	±10PPM	±15 PPM	±20PPM	±30PPM	±50PPM
0 to +50 °C		★	★	★	★	★	★
-10 to +60 °C		★	★	★	★	★	★
-20 to +70 °C			★	★	★	★	★
-30 to +85 °C					★	★	★
-40 to +90 °C						★	★



