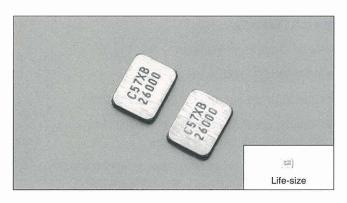
# AT-CUT CRYSTAL UNIT (SMD · Ceramic Package)



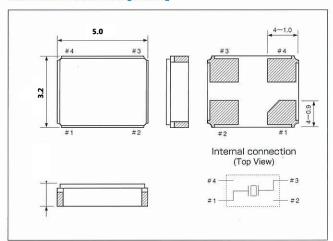
# **CS532**



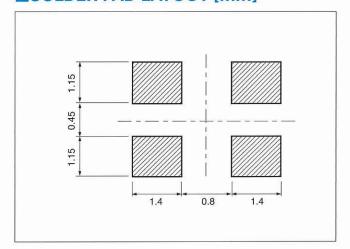
#### **FEATURES**

- High-density SMD type.
- Reliable ceramic package and excellent environmental characteristics.
- Suitable for various applications such as communication devices, AV devices and other equipment.

# **DIMENSION** [mm]



### **SOLDER PAD LAYOUT [mm]**



#### **INSTANDARD SPECIFICATIONS**

Item	Model	CS532	Conditions	
Nominal Frequency	fo	13.0MHz~54.0MHz (Fundamental)	Need to contact us for the available frequency	
Frequency Tolerance	△f/fo	±30ppm	at 25°C	
Frequency Tolerance over Operating Temperature Range	△f/fo	±30ppm	-10°C~+60°C	
Operating Temperature Range	TOPR	-40°C∼+85°C		
Storage Temperature Range	TSTR	−55°C ~+125°C		
Motional (series) resistance	R <sub>1</sub>	Refer to the following table	at 25°C	
Load capacitance	CL	16.0pF, 18.0pF	Need to specify your requirement	
Shunt capacitance	Co	5.0pF Max.		
Level of drive	DL	10 μW(100 μW Max.)		
Insulation Resistance	lR	500M Ω Min.	DC100V±15V	
Aging (first year)	△f/fo	±5ppm Max.	25℃±3℃	

### **■MOTIONAL (SERIES) RESISTANCE (R₁)**

Frequency Range	13.0MHz≦fo<16.0MHz	16.0MHz≦fo<20.0MHz	20.0MHz≦f0<30.0MHz	30.0MHz≦f0<54.0MHz
ESR	150 Ω Max.	120 Ω Max.	80 Ω Max.	50 Ω Max.