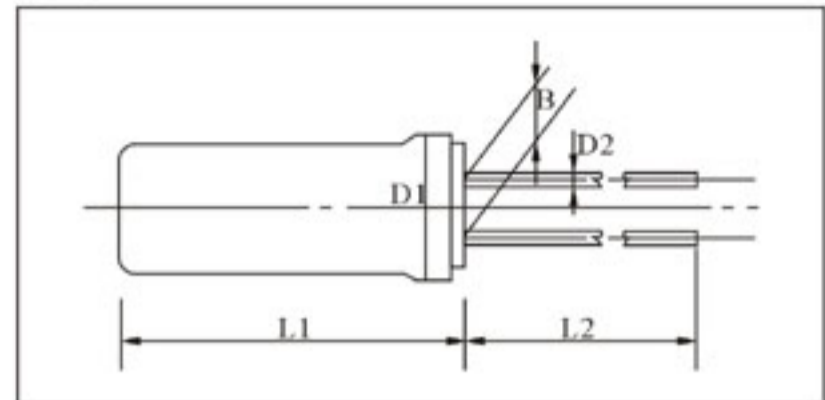


QUARTZ CRYSTAL RESONATOR

石英晶体谐振器

AT38/AT39/AT310 DIP TYPE

DIMENSIONS (Unit: mm) 外形尺寸



| 外型 | L1 | L2 | D1 | D2 | B |
|---------------|------|------|------|------|-----|
| AT38 (ø3x8) | 8.3 | 10.0 | ø3.1 | ø0.3 | 0.8 |
| AT39 (ø3x9) | 9.3 | 10.0 | ø3.1 | ø0.3 | 1.1 |
| AT310 (ø3x10) | 10.3 | 10.0 | ø3.1 | ø0.3 | 1.1 |

PART NUMBER GUIDE 部件号示例 e.g. FTX20.945M20A8 (*A8=AT38 A9=AT39 A10=AT310)

| | Quartz Crystal Resonator 石英晶体谐振器 | Frequency 频率 | Load Capacitance 负载电容 | *Package Type 盒形 |
|----|-------------------------------------|-----------------|--------------------------|---------------------|
| FT | X | 20.945MHz | 20 | A8 |

1. PARAMETERS 技术参数

| PARAMETER | 参数 | SPECIFICATION 规格 |
|-----------------------------|--------------|---|
| Frequency Range | 频率范围 (MHz) | 3.579MHz ~ 60MHz |
| Operation Mode | 振动模式 | See Table 2 见表2 |
| Load Capacitance C_L | 负载电容 (pF) | 20pF std. 8 to 35pF series available |
| Frequency Tolerance F_L | 调整频差 (ppm) | ±10ppm ~ ±50ppm |
| Temperature Tolerance T_L | 温度频差 (ppm) | ±50ppm Std. |
| Operating Temperature O_T | 工作温度 (°C) | -10°C to +60°C Std. (See P4 Table 3 见第四页表3) |
| Storage Temperature S_T | 储存温度 (°C) | -40°C ~ +85°C |
| Motional Resistance R_s | 谐振电阻 (Ω) | See Table 2 见表2 |
| Shunt Capacitance C_0 | 静态电容 (pF) | 7pF max |
| Drive Level D_L | 激励电平 (mW) | 0.01mW ~ 1mW |
| Insulation Resistance I_s | 绝缘电阻 (MΩ) | 500(DC 50 ± 10V) min |
| Aging@25°C | 年老化率 (ppm/y) | ±5ppm max |

All specifications subject change without notice. 规格变化, 如不另行通知

2. OPERATION MODE AND RS 振动模式与谐振电阻

| FREQUENCY | TYPE | MODE | RS (Ωmax) |
|---------------------|------|--------------------------|-----------|
| 3.579MHz~3.699MHz | | FUND | 200 |
| 3.700MHz~3.999MHz | | FUND | 180 |
| 4.000MHz~4.099MHz | | FUND | 150 |
| 4.100MHz~4.999MHz | | FUND | 120 |
| 5.000MHz~5.999MHz | | FUND | 100 |
| 7.000MHz~9.999MHz | | FUND | 80 |
| 10.000MHz~11.999MHz | | FUND | 70 |
| 12.000MHz~13.999MHz | | FUND | 60 |
| 14.000MHz~15.999MHz | | FUND | 50 |
| 16.000MHz~30.000MHz | | FUND | 40 |
| 27.000MHz~60.000MHz | | 3 rd OVERTONE | 100 |

 AT CUTTING
TEMPERATURE
CHARACTERISTICS
AT 切频率温度特性图
