



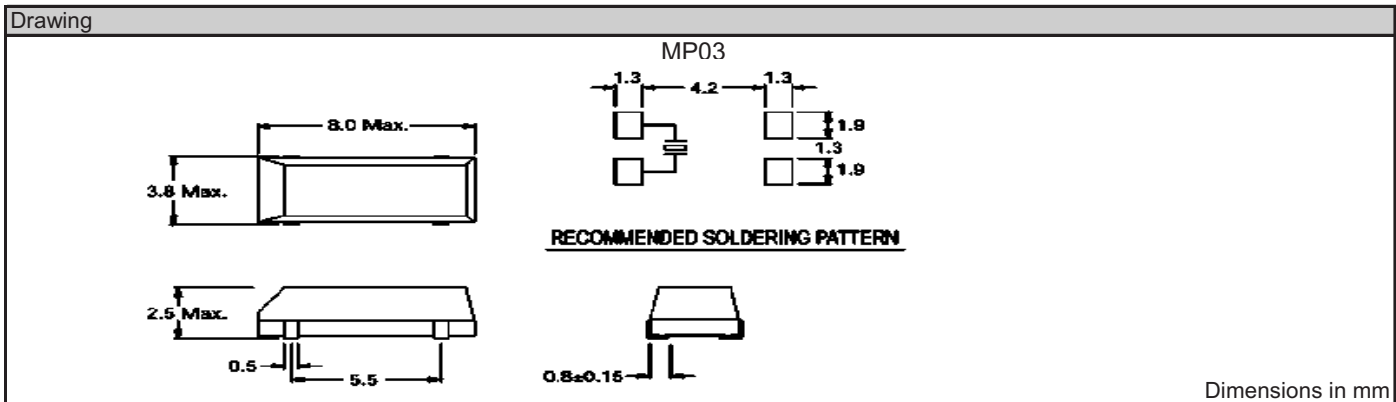
MP03



Features:

- Surface mount
- High performance/cost ratio
- Excellent vibration & shock resistance

Specifications				
		Symbol	MP03	Remarks
Frequency range		f	32.768kHz	Standard
Frequency tolerance, Ta=25°C		$\Delta f/f$	$\pm 20\text{ppm} \sim \pm 50\text{ppm}$	Others are offered
Load capacitance		$C_L$	6pF, 12.5pF (Std.)	Please specify
Temp. coefficient		A	$-0.04 \times 10^{-6}/^\circ\text{C}^2$	Max
Temperature range	Storage temp.	$T_{STG}$	$-55^\circ\text{C} \sim +125^\circ\text{C}$	
	Operating temp.	$T_{OPR}$	$-40^\circ\text{C} \sim +85^\circ\text{C}$	Others are offered
Drive level	Maximum drive level	$M_{DL}$	1 $\mu$ W	Standard
	Recommended drive level	$R_{DL}$	-	
Series resistance		$R_1$	50k Ohm	Max (25°C $\pm 3^\circ\text{C}$ )
Shunt capacitance		$C_0$	1.3pF $\sim$ 2pF	
Insulation resistance		$I_R$	500M Ohm	Min
Aging		$\Delta f_A$	$\pm 5\text{ppm}/\text{Year typ}$	Max
Shock resistance		SR	$\pm 10\text{ppm}$	Max



Order key						
Part	Frequency	Package	Frequency tolerance	Temperature range	Load capacitance	Option
Q	- 32.768000k	- MP03	- 50	- E	- 12.5	- TR
Q=Quartz	k=kHz	MP03	$\pm\text{ppm}$ (25°C)	A= 0°C $\sim$ +70°C B= -10°C $\sim$ +60°C C= -10°C $\sim$ +70°C D= -20°C $\sim$ +70°C E= -40°C $\sim$ +85°C	pF SR=series	TR=Tape and reel X=Special options