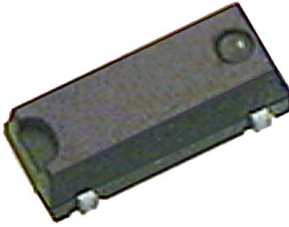


## BQD series Quartz CRYSTALS

### AT-CUT CRYSTAL, SMD Style Holder



- Surface mount molded high temperature thermoplastic holder
- Frequency Tolerance of  $\pm 20$  or  $\pm 50$ ppm
- Bulk or Tape & Reel (1000pcs./reel)

### ELECTRICAL / MECHANICAL SPECIFICATIONS

Frequency		32.768 kHz	20 ~ 165 kHz
Temperature Range	Operating	-40°C to +85°C	
	Storage	-55°C to +125°C	
Frequency Tolerance @25°C		$\pm 20$ (STD), $\pm 50$ ppm	$\pm 50$ , $\pm 100$ ppm
Aging @25°C		$\pm 3$ ppm/year max.	$\pm 5$ ppm/year max.
Load Capacitance		12pF, 20pF	
Drive Level		1.0mW max.	
Shunt Capacitance		0.9pF typ.	2.0pF ~ 0.6pf
Reflow Soldering Condition		2x @+260°C in<10 Sec	
Resonance Mode		Fundamental	
Equivalent Series Resistance		50k $\Omega$ max.	55k $\Omega$ ~ 10k $\Omega$
Peak Temperature (frequency)		25°C $\pm 5$ °C	
Temperature Coefficient (frequency)		-0.04ppm/°C2 max.	
Motional Capacitance		1.8pF typ.	4.0fF ~ 0.6fF
Insulation Resistance		500M $\Omega$ min.	
Shock Resistance		$\pm 5$ ppm max.	

