

HHS SERIES - RESISTANCE WELD CRYSTAL



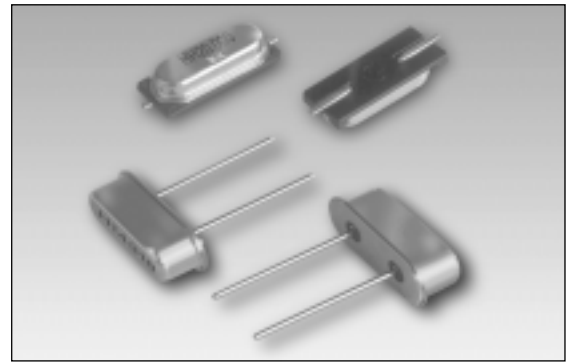
The HHS series is the lowest profile HC49/USS and HC49/USSM (surface mount) industry standard crystal, with the same lead spacing as the HC49U/US and encased in the rugged resistance weld package. With a maximum height of only 2.5mm for through hole type and 3.2mm for surface mount, these crystals are both cost effective and ideal for many space limited applications.

FEATURES:

- Lowest profile (2.5mm / 3.2mm SMD)
- Industry standard lead spacing
- Resistance welded for good aging
- Cost effective

OPTIONS:

- Extended temp. range
- Surface mount package
- Insulator
- Tighter tolerance option
- Tape & Reel



ELECTRICAL SPECIFICATIONS

PARAMETERS	CONDITIONS	MINIMUM	MAXIMUM	UNIT
FREQUENCY RANGE		3.200	70.000	MHz
FREQUENCY TOLERANCE	@ 25°C	-30*	+30*	PPM
FREQUENCY STABILITY, REF @ 25°C	3.200 - 70.000 MHz	-50*	+50*	PPM
OPERATING TEMPERATURE RANGE		0°C to +70°C / -40°C to +85°C		°C
STORAGE TEMPERATURE RANGE		-30°C to +85°C / -55°C to +125°C		°C
SHUNT CAPACITANCE (C ₀)		7.0		pF
LOAD CAPACITANCE (C _L)	Per customer spec.	10.0	Series	pF
DRIVE LEVEL	3.200 to 70.000 MHz	0.5		mW
AGING CHARACTERISTICS	@ 25°C per year	± 5 max.		PPM

* Tight tolerances optional - please specify

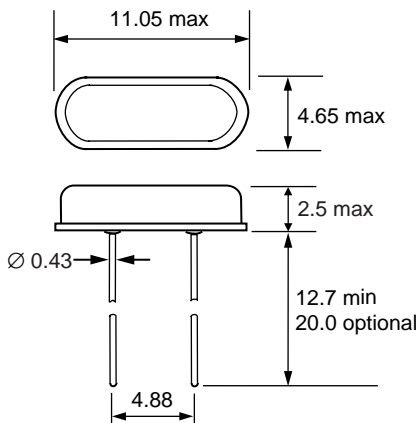
EQUIVALENT SERIES RESISTANCE (ESR) SPECIFICATIONS

FREQUENCY RANGE (MHz)	MODE	ESR (Ω) MAX	FREQUENCY RANGE (MHz)	MODE	ESR (Ω) MAX
3.200 - 3.500	FUNDAMENTAL	300	8.00 - 11.99	FUNDAMENTAL	60 to 80
3.500 - 5.00	FUNDAMENTAL	100 to 200	12.00 - 30.00	FUNDAMENTAL	30 to 40
5.00 - 7.99	FUNDAMENTAL	80 to 120	27.00 - 70.00	3rd OVERTONE	100

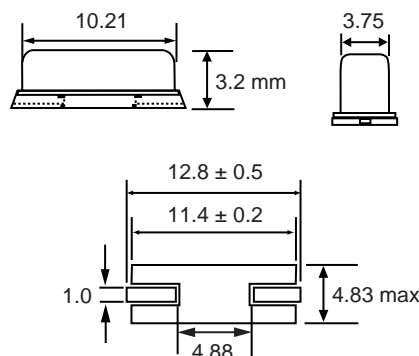
MECHANICAL DRAWING

PART NUMBERING GUIDE

HC49/USS HHS TYPE



HC49/USSM HHS-SM TYPE



EXAMPLE: HHS2700F-20-SM

HHS	2700F	- 20	-SM
HHS Series	Frequency F = Fund (> 25 MHz)	Capacitance Load S = Series	Options

OPTIONS:

- SM: Surface Mount
- E: -40+85°C
- E105: -40+105°C
- E55/105: -55+105°C
- E125: -55+125°C

- TR: Tape & Reel
- INS: With Insulator
- XPPM: Tolerance (specify)
- SP: Per specifications