SERIES AS (HC-49/S)

- **FEATURES**
  - EXCELLENT CLOCK SIGNAL GENERATOR FOR CPU's
  - 3.5 mm MAXIMUM HEIGHT
  - AVAILABLE IN EXTENDED TEMPERATURE RANGE
  - SAME PIN LAYOUT AS HC-49/U

- **SPECIFICATIONS**

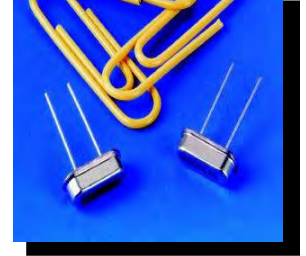| PARAMETER		VALUE
FREQUENCY RANGE		3.500 MHz TO 70.000 MHz
MODE OF OSCILLATION	FUNDAMENTAL	3.500 MHz TO 40.320 MHz
	THIRD OVERTONE	24.576 MHz TO 70.000 MHz
FREQUENCY TOLERANCE AT 25°C		±30 PPM STANDARD (±10, ±20 AND ±50 PPM AVAILABLE)
FREQUENCY STABILITY OVER TEMPERATURE		±50 PPM STANDARD (±10, ±20, ±50 AND ±100 PPM AVAILABLE)
OPERATING TEMPERATURE RANGE		-20°C TO +70°C STANDARD -40°C TO +85°C EXTENDED
STORAGE TEMPERATURE RANGE		-55°C TO +125°C
AGING		±5 PPM PER YEAR MAXIMUM
LOAD CAPACITANCE		10 pF to 32 pF OR SERIES
EQUIVALENT SERIES RESISTANCE		SEE TABLE 1
SHUNT CAPACITANCE		7.0 pF MAXIMUM
DRIVE LEVEL		500 µW MAX
SHOCK RESISTANCE		±5 PPM MAXIMUM 75 cm DROP TEST IN 3 AXES ON TO A HARD SURFACE
REFLOW CONDITIONS		260°C ±5°C FOR 10s MAXIMUM
CRYSTAL CUT		AT STRIP

TABLE 1								
FREQUENCY (MHz)	MODE	MAX ESR (OHMS)	FREQUENCY (MHz)	MODE	MAX ESR (OHMS)	FREQUENCY (MHz)	MODE	MAX ESR (OHMS)
3.500	FUND	180	7.3728	FUND	70	11.2896	FUND	50
3.579545	FUND	180	7.680	FUND	70	12.000	FUND	50
3.6864	FUND	150	8.000	FUND	60	12.288	FUND	50
4.000	FUND	130	8.064	FUND	60	12.800	FUND	50
4.032	FUND	130	8.192	FUND	60	14.31818	FUND	50
4.096	FUND	130	8.6436	FUND	60	14.7456	FUND	50
4.194304	FUND	130	9.600	FUND	60	16.000 TO 24.000	FUND	40
4.433619	FUND	130	9.8304	FUND	60	24.576	FUND/3OT	40/80
4.9152	FUND	130	10.000	FUND	50	27.000	FUND/3OT	40/80
5.0688	FUND	100	10.240	FUND	50	28.63636	FUND/3OT	40/80
6.000	FUND	80	10.244	FUND	50	29.000 TO 40.000	FUND/3OT	40/70
6.144	FUND	80	10.245	FUND	50	40.320	FUND/3OT	40/70
6.176	FUND	80	11.000	FUND	50	47.920	3OT	70
7.15909	FUND	70	11.0592	FUND	50	48.000 TO 70.000	3OT	70

OTHER FREQUENCIES ARE AVAILABLE CONTACT SALES

■ PART NUMBERING SYSTEM

TYPE	-	FREQUENCY	-	LOAD CAPACITANCE	-	MODE	-	TOLERANCE/STABLITY (PPM/PPM)
AS	-	IN MHz	-	10 TO 32 pF FOR PARALLEL S FOR SERIES	-	Blank FOR < 24.576 MHz F FOR ≥ 24.576 MHz 3OT THIRD OVERTONE	-	Blank FOR STANDARD PPMPPM Example: 1020, 2050

-	EXTENDED TEMPERATURE	-	MECHANICAL OPTIONS	-	HEIGHT (H)	-	TAPE & REEL (optional)
-	Blank FOR STANDARD EXT FOR EXTENDED	-	3PIN for THREE PIN BASE SP for SPACER CLxx for CUT LEADS (xx = LENGTH)	-	Blank FOR 3.5 mm (STANDARD) H32 3.2 mm (CUSTOM) H30 3.0 mm (CUSTOM) H25 2.5 mm (CUSTOM)	-	TR

EXAMPLE: AS-24.000-18
Through Hole Crystal, HC-49/SHORT, 24.000 MHz, Fundamental mode, 18 pF load, ±30 ppm Tolerance, ±50 ppm Stability, from -20°C to +70°C

● OUTLINE DRAWINGS