SCM132 SERIES

10.5mm x 3.2mm CYLINDRICAL CRYSTAL

FEATURES	APPLICATIONS
- ±20ppm/±30ppm (Tolerance/Stability) Available - RoHS Compliant - Wide Frequency Range - AT-Cut - Bulk Packing	- Computer Peripherals - Microprocessor - Test Equipment

PART NUMBERING GUIDE

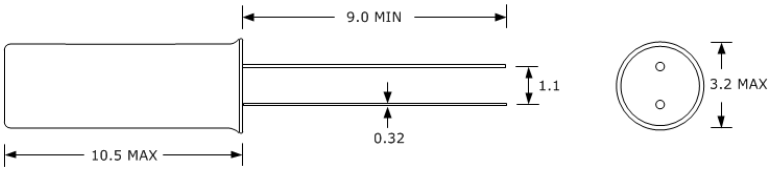
SCM 13 2 18 A A 48 T – 48.000M

- **SUNTSU CYLINDRICAL MHz CRYSTAL**
- **10.5mm x 3.2mm**
- **2 LEAD**
- **LOAD CAPACITANCE**
  S: SERIES
  7 - 30: 7pF – 30pF
- **FREQUENCY TOLERANCE**
  A: ±50ppm
  B: ±30ppm
  C: ±25ppm
  D: ±20ppm
- **FREQUENCY STABILITY**
  A: ±50ppm
  B: ±30ppm
- **OPERATING TEMPERATURE RANGE**
  07: 0°C to + 70°C
  16: -10°C to + 60°C
  17: -10°C to + 70°C
  27: -20°C to + 70°C
  38: -30°C to + 85°C
  48: -40°C to + 85°C
- **MODE OF OPERATION**
  BLANK: FUNDAMENTAL
  T: THIRD OVERTONE
- **FREQUENCY (MHz)**

Cage Code: 4GUT4
To customize your parameters contact a Suntsu representative.

ELECTRICAL PARAMETERS		UNITS	MIN.	TYP.	MAX.	REMARKS
Frequency Range		MHz	3.579545		29.999	AT-Cut Fundamental.
			30		90	3rd Overtone.
Frequency Tolerance at +25ºC		ppm	-20		+20	See part numbering guide for options.
Frequency Stability vs. Operating Temperature (Ref. 25°C)		ppm	-30		+30	See part numbering guide for options.
vs. Aging			-5		+5	First year @ +25ºC.
Operating Temperature		ºC	-40		+85	See part numbering guide for options.
Storage Temperature		ºC	-40		+125	
Load Capacitance		pF	7		30	See part numbering guide for options.
Shunt Capacitance		pF			5	
Drive Level		µW			100	
Insulation Resistance		MΩ	500			@ 100VDC ± 15V.
Equivalent Series Resistance	3.579MHz ~ 3.999MHz	Ω			200	AT-Cut Fundamental.
	4.000MHz ~ 5.999MHz				150	AT-Cut Fundamental.
	6.000MHz ~ 6.999MHz				100	AT-Cut Fundamental.
	7.000MHz ~ 8.999MHz				80	AT-Cut Fundamental.
	9.000MHz ~ 12.999MHz				60	AT-Cut Fundamental.
	13.000MHz ~ 19.999MHz				50	AT-Cut Fundamental.
	20.000MHz ~ 29.999MHz				30	AT-Cut Fundamental.
	30.000MHz ~ 69.999MHz				100	3rd Overtone.
	70.000MHz ~ 90.000MHz				80	3rd Overtone.

OUTLINE DRAWING



NOTE: Dimensions in millimeters (mm).

MARKING

Line 1: XX.XXX F Y WW

- XX.XXX: Frequency in MHz
- F: Manufacturing Identifier
- Y: Year
- WW: Week

ENVIRONMENTAL SPECIFICATIONS		MECHANICAL SPECIFICATIONS	
Temperature Cycling	MIL-STD-883, Method 1010, Condition B	Mechanical Shock	MIL-STD-202, Method 213, Condition C
Fine Leak Test	MIL-STD-883, Method 1014, Condition A	Vibration	MIL-STD-883, Method 2007, Condition A
Gross Leak Test	MIL-STD-883, Method 1014, Condition C	Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K
Moisture Resistance	MIL-STD-883, Method 1004	Resistance to Solvents	MIL-STD-202, Method 215
Moisture Sensitivity	J-STD-020, MSL 1	Solderability	MIL-STD-883, Method 2003