

Operational Description

FCC ID:AEZSCP-47H

Model:SCP-4700

SANYO SCP-4700 is a Dual-Band Mode digital CDMA/AMPS phone. It is designed to comply with Part 15, Part 22 and Part 24 of the CFR.

PCS Band (CDMA):

TX Frequencies:	1851.25MHz	-	1908.75MHz
RX Frequencies:	1931.25MHz	-	1988.75MHz
LO Frequencies:	1720.87MHz	-	1778.37MHz
TCXO Frequency:	19.68MHz		

Cellular Band (AMPS)

TX Frequencies:	824.040MHz	-	848.970MHz
RX Frequencies:	869.040MHz	-	893.970MHz
LO Frequencies:	954.42MHz	-	979.35MHz
TCXO Frequency:	19.68MHz		

PCS CDMA Max. Conducted Output Power : +23.5dBm (0.23W)

AMPS Max. Conducted Output Power: +26.0dBm (0.40W)

Battery voltage: 3.6V Nominal, Li-ion (Supplied with phone)

Frequency Stabilization

A voltage controlled temperature compensated crystal oscillator (VCTCXO) is utilized as a frequency reference for all of the transceiver local oscillators. This crystal oscillator is specified to a frequency stability of +/- 2.5ppm over temperature and voltage variations. The synthesizer lock status is constantly monitored by the microprocessor and transmission is disabled whenever an out of lock condition is detected. The mobile is locked to the base station during operation. The mobile receiver constantly monitors the received signal from the base station and makes necessary frequency adjustments on the VCTCXO to correct any frequency errors between the mobile and the base station.

Suppression of Spurious Radiation

Spurious and harmonic suppression is achieved by proper design with various filters and sufficient use of EMI shields. Rigorous testing at the factory ensures continuous compliance.

Limiting Power

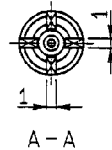
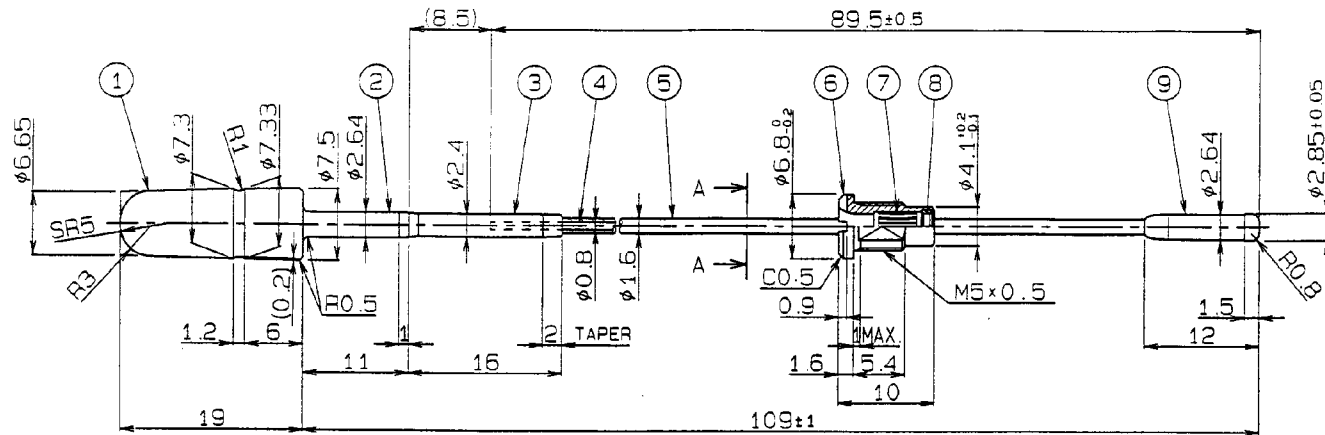
Each mobile is individually calibrated at the factory to ensure Max. power of no more than +23.5dBm for PCS CDMA and +26.0dBm for AMPS by employing a proper frequency and temperature compensation schemes for both the TX and RX automatic gain control (AGC) amplifiers. There are also hardware circuitries to monitor TX power and software reset limits to limit maximum TX power.

Limiting Modulation

The audio input is sampled, digitally limited, and then filtered to amplitude and frequency limit the signal applied to the modulator. The device supports AMPS standards and ANSI J-STD-008 for CDMA operation. The device has an operating temperature range of -30 to $+60^{\circ}\text{C}$. The functions include Compressor, PLL lock detector for received SAT, filtering of received data, and audio signal filtering for signals.

図面を測測しない事

DO NOT SCALE DRAWING



NOTES

1. TOLERANCE NOT SPECIFIED TO BE ± 0.2
2. SCREW PART TO PASS 3RD GRADE SCREW GAUGE

9	STOPPER	1	BRASS · MBCr		
8	HOLDER RING	1	BRASS · MBNi		
7	SPRING	1	BRASS		
6	HOLDER	1	ZDC · MZNi		
5	TUBE	1	FBT		BLACK
4	ELEMENT	1	Ni-Ti		
3	JOINT	1	NYLON		BLACK
2	TOP PLUG	1	BRASS · MBCr		BLACK
1	TOP	1	A3S		BLACK

ITEM	DESCRIPTION	QUANTITY	MATERIAL	TREATMENT	PART DRAWING NO.	NOTE
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SCALE	DESIGNED	DRAWN	INSPECTED	APPROVED	DESCRIPTION
R 2:1	9. Mar. '00	9. Mar. '00	9. MAR '00	9. MAR '00	A PROVISIONAL OUTSIDE APPEARANCE DRAWING

DIM	MASS	日本アンテナ株式会社		DRAWING NO.
m-m		NIPPON ANTENNA CO., LTD.		N8-S135-03

寸法	公差
RANGE	COMMON TOLERANCE
1-10	±0.2/±0.4
1-25	±0.3/±0.6
1-80	±0.5/±1.0
1-250	±1.0/±1.5
1-1000	±1.0/±1.5

REV	DATE	REVISION RECORD	DESIGNED	APPROVED

Antenna Gain (Peak Value)

	Extended (Whip)	Retracted (Helical)
PCS	1.8	0.8

(Unit:dBi)

	Extended (Whip)	Retracted (Helical)
AMPS	2.1	0.0

(Unit:dBd)