

SMD VCXO 7.0x5.0mm 4pad 5.0 VDC MHz

FEATURES

Pb-free
 RoHS-2 2011/65/EU
 compliant

- High reliability for low cost
- Frequency stability to ± 20 ppm
- Available in 5.0 and 3.3 Volt
- Extended temperature range -40°C to $+85^{\circ}\text{C}$
- Applications: fibre channel, telecom, set-top box, broadband, etc.

GENERAL DATA

| | | | |
|-----------------------------------------------------------------------------------|-----------------------------|---------------------------------------------------------|-----------------------------|
| SMD-OSCILLATOR SERIES | | SMD-VCXO4-0507 | |
| PACKAGE | | Ceramic package 7.0 x 5.0 x 1.8 mm ³ | |
| FREQUENCY RANGE | | 1.0 ~ 40.0 MHz | |
| FREQUENCY STABILITY | | ± 20 ppm / ± 25 ppm / ± 50 ppm | |
| OPERATING TEMPERATURE RANGE | | $-20/+70^{\circ}\text{C}$ ~ $-40/+85^{\circ}\text{C}$ | |
| STORAGE TEMPERATURE RANGE | | $-55/+125^{\circ}\text{C}$ | |
| INPUT | VOLTAGE | | +5.0VDC $\pm 5\%$ |
| | CURRENT | | 25 mA max. |
| OUTPUT | SYMMETRY | STANDARD | 40/60% |
| | | OPTION | 45/55% |
| | SIGNAL | | CMOS/HCMOS |
| | RISE AND FALL TIME | | 8 ns max. |
| | "0" LEVEL | CMOS/HCMOS | 0.4VDD max. or 10% VDD max. |
| "1" LEVEL | 2.4VDD min. or 90% VDD min. | | |
| LOAD | | 15 pF ~ 30 pF | |
| START-UP TIME | | 10 mS max. | |
| INPUT IMPEDANCE | | 10 kW min. | |
| MODULATION BANDWIDTH (BW) | | 5 kHz min. | |
| CONTROL VOLTAGE RANGE | | 2.5VDC ± 2.0 VDC | |
| CENTER VOLTAGE | | 2.5VDC | |
| PULLING RANGE | | ± 50 ppm ~ ± 100 ppm min. | |
| LINEARITY | | 10% max. | |
| SLOPE | | POSITIVE | |
| PHASE NOISE | | -70dBc/Hz @10Hz | |
| | | -130dBc/Hz @10kHz | |
| PIN CONNECTION | | PIN 1 | CONTROL VOLTAGE |
| | | PIN 2 | GROUND |
| | | PIN 3 | OUTPUT |
| | | PIN 4 | SUPPLY VOLTAGE |
| DELIVERY FORM | | Tape and Reel / 1.000 pcs. per reel, lower QTY possible | |
| OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION | | | |

CRYSTALS
OSCILLATORS
CERAMIC RESONATORS

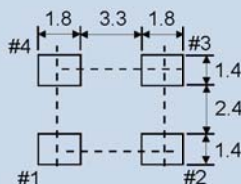
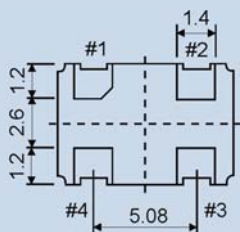
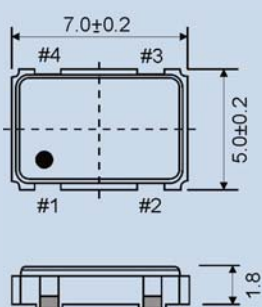


Premium Quality by
PETERMANN-TECHNIK

CERAMIC FILTERS
SAW COMPONENTS

Spec.01 • REV.00 • August 2013

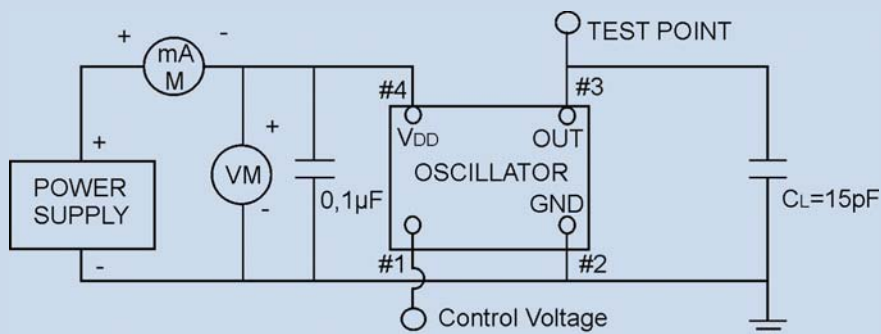
OUTLINE DRAWING



| PIN | FUNCTION |
|-----|-----------------|
| #1 | VOLTAGE CONTROL |
| #2 | GROUND |
| #3 | OUTPUT |
| #4 | VDD |

Unit:mm

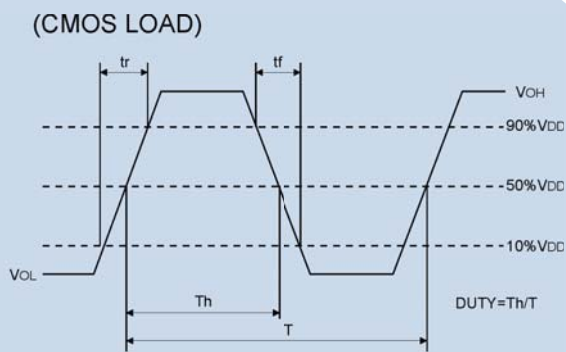
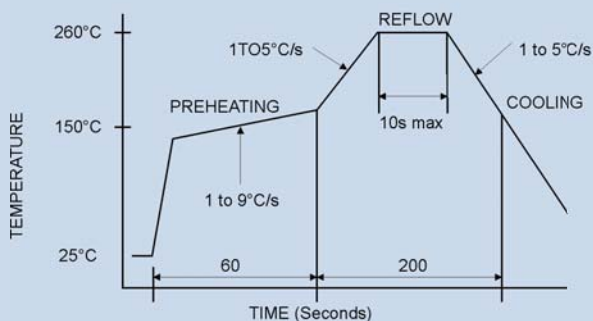
TEST CIRCUIT FOR CMOS/HCMOS



NOTE: CL includes probe and fixture capacitance

REFLOW SOLDER PROFILE

CMOS/HCMOS LOAD



CRYSTALS
OSCILLATORS
CERAMIC RESONATORS

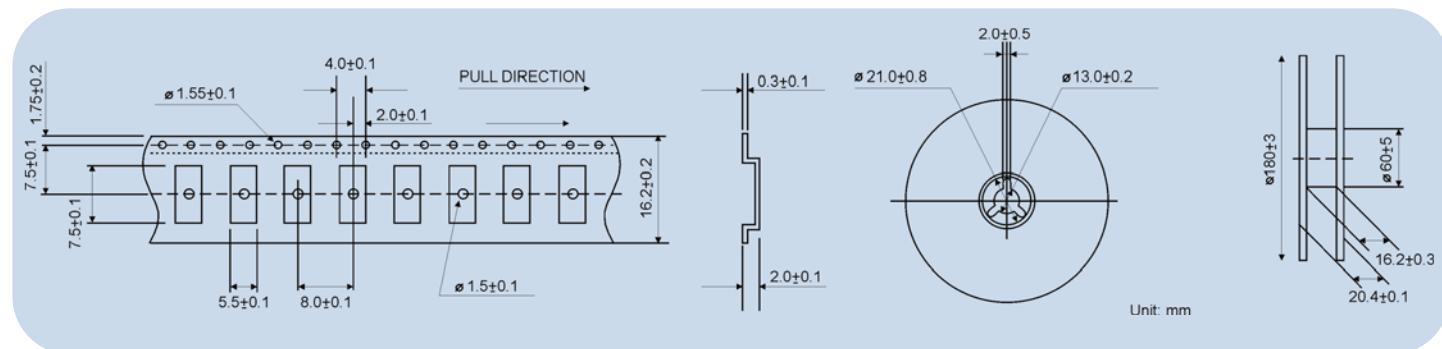


Premium Quality by
PETERMANN-TECHNIK

CERAMIC FILTERS
SAW COMPONENTS

Spec.01 • REV.00 • August 2013

REEL SPECIFICATION



ORDERING INFORMATION

| Series & Voltage | Frequency Stability | Temperature Range Options | Symmetry | Pulling range | Tri-State Control | Frequency | Delivery Form |
|------------------|-------------------------------------------|------------------------------------------------------------|-----------------------------|------------------|---------------------------------|------------|---------------|
| SMD-VCXO4-0507 | 50=±50ppm 25=±25ppm 20=±20ppm X* | B*= 0+70°C N=-10+60°C M=-20+70°C W=-40+85°C X* | B*=40/60% or S=45/55% | B*=±100ppm X* | B*=Not Connected E=TRI-STATE | 27.000 MHz | T |

Example: SMD-VCXO4-0507-25-W-S-100-E-27.000MHz-T
 PLEASE INDICATE YOUR REQUIRED PARAMETERS

B=BLANK, S=SPECIAL, X=YOUR PARAMETERS , T=TAPE AND REEL

CRYSTALS
OSCILLATORS
CERAMIC RESONATORS



CERAMIC FILTERS
SAW COMPONENTS
 Spec.01 • REV.00 • August 2013