

WITHOUT DRIVER ☒ FS

WITH DRIVER ☐ FSD

3005R-SMT

CUSTOMER Catalog

CUSTOMER P/N

DESCRIPTION TINY₁₆ oscillator (SMT Mount), RoHS Compliant

RF SPECIFICATIONS	TUNING RANGE (GHz)	START 10[1]	TO 20.5	STOP
POWER OUT (dBm)	+3	MIN		
POWER VARIATION OVER TUNERANGE (dB)	13	MAX		
HARMONICS (dBc)	-12	MAX		
NON-HARMONICS (dBc)	-70	MAX	☐	
TUNING LINEARITY	±35	MHz MAX	OR +/-	% MAX
TEMPERATURE DRIFT (MHz)	±60	☒ MAX	☐ TYP	
HYSTERESIS (MHz)	60	☒ MAX	☐ TYP	
FREQUENCY PUSHING (MHz/V)	2.0	☒ MAX	☐ TYP	
FREQUENCY PULLING - 1.5:1 VSWR (MHz)	2.0	☐ MAX	☐ TYP	
SSB PHASE NOISE (dBc/Hz)	@	☒ MAX	☐ TYP	
	100 KHz @ [2]	☒ MAX	☐ TYP	

DC SPECIFICATIONS

BIAS +5.0	VDC @ 70	mA	☐ MAX	☒ TYP
n/a	VDC @ n/a	mA	☐ MAX	☐ TYP
HEATERS n/a	VDC @	mA	☐ MAX	☐ TYP
@ 25 ° C STEADY STATE				
mA SURGE AT TURN-ON		☒	MAX	☐ TYP

ENVIRONMENTAL SPECIFICATIONS

SCREENING

TEMP RANGE +10 DEG C TO +60 DEG C COMM ☒ MIL ☐ MIL(S) ☐

TUNING COIL

SENSITIVITY (MHz/mA)	11.5	☒ TYP	%
RESISTANCE (Ohms)	10.5	☐ MAX	☒ TYP
INDUCTANCE (mH)	30	☐ MAX	☒ TYP

FM COIL ☒

SENSITIVITY (KHz/mA)	350	☐ TYP	☒ ±15 %
3 dB BANDWIDTH (KHz)	400	☐ MIN	☒ TYP
RESISTANCE (Ohms)	1	☐ MAX	☒ TYP
INDUCTANCE (uH)	1	☐ MAX	☒ TYP

DRIVER

ANALOG ☐

OR

DIGITAL ☐

TUNING VOLTAGE (V) FROM	TO	NO. OF BITS
CIRCUIT POWER	VDC @	mA, MAX
	VDC @	mA, MAX
	VDC @	mA, MAX
		LATCHING

TRANSPARENT ☐ EDGE TRIG ☐ LEVEL TRIG ☐
OUTLINE IN-051684-000

PRODUCT CODE YIGS

OTHER SPECS:

1) Zero current frequency to be 15GHz +/- 500MHz

[2] -123 dBc/Hz to 16GHz, -120 dBc/Hz to 18.4GHz, -118dBc/Hz to 20.5GHz

CONTROLLING DOCUMENT

CUSTOMER (SCD NO. IS

) X TELEDYNE

ASSIGNED BY MLK

DATE 6/10/2013

REV -