



5x7,5mm SMD LVPECL-OSCILLATOR +3,3V CMF1



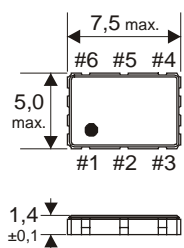
FREQUENZSTABILITÄT FREQUENCY STABILITY	
Modell <i>Model</i>	
CM1F1A	±100ppm/-10~+70°C
CM2F1A	±50ppm/-10~+70°C
CM3F1A	±25ppm/-10~+70°C
CM1F1R	±100ppm/-40~+85°C
CM2F1R	±50ppm/-40~+85°C
CM3F1R	±25ppm/-40~+85°C

BETRIEBSBEDINGUNGEN OPERATING CONDITIONS	
Betriebstemperatur <i>operating temp.</i>	-10~+70°C, -40~+85°C
Lagertemperatur <i>storage temperature</i>	-55~+125°C
Betriebsspannung V_{CC} <i>supply voltage V_{CC}</i>	+3,3V ±5%

Elektrische Daten <i>electrical characteristics</i>			
$T_a = 25^\circ\text{C}$, $V_{CC} = 3,3\text{ V}$, $V_{TT} = 1,3\text{ V}$, $R_{TT} = 50\ \Omega$			
Parameter <i>parameter</i>	Bedingungen <i>conditions</i>	Frequenzbereich <i>frequency range</i>	Spezifikationen <i>specifications</i>
max. Stromaufnahme <i>max. input current</i>	I_{CC}	25 ~ 170 MHz 170+ ~ 315 MHz	60 mA max. 88 mA max.
Frequenzstabilität <i>frequency stability</i>	über alles *) <i>all conditions *)</i>	25,000 ~ 315,000 MHz	±25 ppm ~ ±100 ppm
Tastverhältnis <i>symmetry</i>	@50% V_{p-p}		40/60 %
Ausgangsspannung <i>output voltage</i>	V_{OL} V_{OH}	"0" level "1" level	1,7 V max. 2,2 V min.
Anstiegszeit max. <i>rise time max.</i>	T_R	20% - 80% V_{p-p}	1,0 ns
Abfallzeit max. <i>fall time max.</i>	T_F	80% - 20% V_{p-p}	1,0 ns
Ruhestrom <i>standby current max.</i>	$V_{IL} \leq 30\% V_{CC}$	Standardfrequenzen <i>standard frequencies</i>	10 μA
Ausgangslast <i>output load</i>	V_{TT} R_{TT}		77,76 100,00 106,25 120,00 125,00 128,00 129,00 130,00 133,33 150,00 155,52 156,25
Startzeit max. <i>start-up time max.</i>	0,0 - 3,3 V	187,50 200,00 212,50 220,00 250,00 256,00	10 ms
Phasen-Jitter max. <i>phase jitter max.</i>	12 kHz ~ 20 MHz	MHz	1 ps RMS
Perioden-Jitter max. <i>period jitter max.</i>	n = 5.000 cycles		5 ps RMS

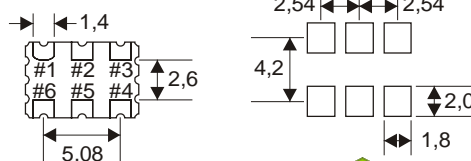
*) Anmerkung: inkl. 25°C Toleranz, Temperaturgang, Spannungs- und Laständerung, Alterung, Schock und Vibration
note: incl. 25°C tolerance, operating temperature range, input voltage, load change, aging, shock and vibration.
±25ppm/-40+85°C ist nicht verfügbar ab 170 MHz ±25ppm/-40+85°C is not available above 170 MHz
A capacitor shall be located just beside the oscillator for power supply noise reduction and a large cap shall be located at power supply!

Abmessungen in mm
dimensions in mm



lead-free/RoHS-conformal

empfohlenes Layout
recommended solder pad layout



Anschlußbelegung
pin connections

#1	E/D
#2	NC
#3	GND
#4	OUTPUT1
#5	OUTPUT2
#6	V_{CC}

enable/disable function

control (pin #1)	output (pin #4-#5)
open	active
"1" ($V_{IH} \geq 70\% V_{CC}$)	active
"0" ($V_{IL} \leq 30\% V_{CC}$)	high Z