



ROHS-Compliant Product

T-75 Series



SMD TCXO according to frequency stability requirements of Telcordia GR-253-Core SMC (SONET MINMUM CLOCK) and of ITU-T G.813 Option 2

1. Specification

Frequency range:	5.0 ... 52.0 MHz
Supply Voltage V_S (nominal values $\pm 5\%$): +2.5 V : +3.3 V :	H A
Current consumption for: HCMOS : Clipped Sine wave:	≤ 6.0 mA ≤ 3.5 mA
Temperature range options: 0 °C to +50 °C : -10 °C to +60 °C : -20 °C to +70 °C : -30 °C to +85 °C : -40 °C to +85 °C :	0050 1060 2070 3085 4085
Frequency stability options: ± 0.50 ppm (not for all temp.range options): ± 1.0 ppm: ± 1.5 ppm: ± 2.0 ppm: ± 2.5 ppm:	J K N O P
Initial frequency tolerance ($T_A = +25$ °C; $V_C = +1.5$ V): 24 h after reflow ($T_{peak} = +260$ °C for 10 sec max):	$\leq \pm 2.00$ ppm
Frequency stability vs. supply voltage changes $V_S \pm 5\%$: Frequency stability vs. load changes $\pm 10\%$:	$\leq \pm 0.10$ ppm $\leq \pm 0.20$ ppm
Aging per year:	$\leq \pm 1.00$ ppm
Frequency Control Options Fixed frequency oscillator: ± 5 ppm: ± 8 ppm: ± 10 ppm: ± 12 ppm (case by case): ± 15 ppm (case by case):	X F E T U V
Control voltage range V_C :	+0.5 V to +2.5 V
Transfer function / Linearity:	positive / 10 %

4				KVG Quartz Crystal Technology GmbH P.O. Box 61 D-74924 Neckarbischofsheim Tel. +49 (0) 7263 / 648-0 Fax. +49 (0) 7263 / 6196
3	Ordering information	13.10.2016	Rudolph	
2	Aging	25.08.2016	Mueller	
1		05.05.2015	Dannenmaier	
ED	Description	Date	Name	



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1. Specification continued

Output signal Option H: level: load:	(LV)HCMOS $V_{OL} \leq 10\% V_S$; $V_{OH} \geq 90\% V_S$ 1 kOhm // 15 pF
Output signal Options C: level: load:	Clipped Sine wave $\geq 0.8 V_{PP}$ 10 kOhm // 10 pF
Storage Temperature Range:	-55 °C to +105 °C

2. Marking

ww KVG yy
Frequency

3. Environmental conditions

According to KVG Product Qualification Procedure AA-QM-202

4. Ordering Information

Type & Package code	Supply voltage	Temperature range LOW/HIGH	Freq. stability	Freq. Tuning Range	Output signal	Nominal frequency
T-75 BF189-xx	A: 3.3 V H: 2.5 V	2070: -20 / +70 °C 4085: -40 / +85 °C	J...S	X; F; E; T; U; V	C; H	- XX.YYY MHz

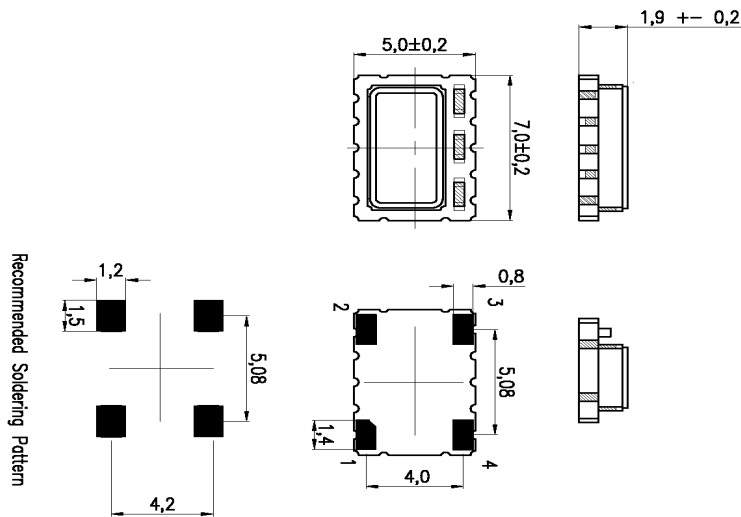
Example: T-75A2070KXH - 26.000 MHz

TCXO; 7 x 5 mm; 3.3 V; -20 to +70 °C; +/-1 ppm; no tuning; HCMOS output

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5. Case

Case Style: BF189-2.0F



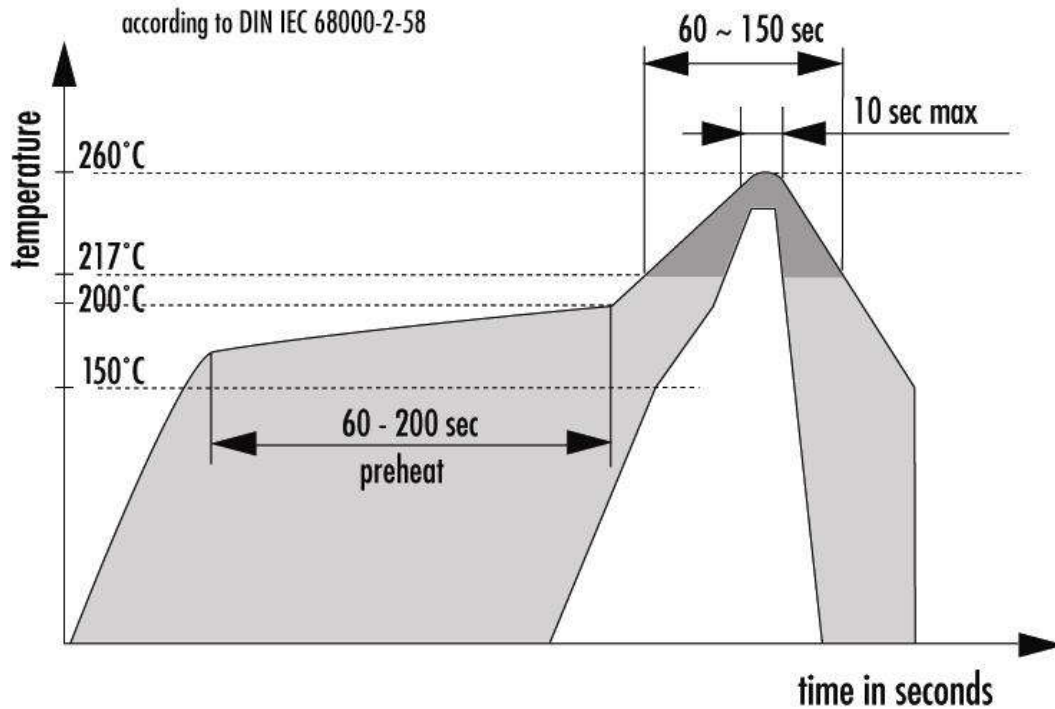
Pin configuration

1. N.C. or control voltage V_C
2. Ground, Case
3. RF Output
4. Supply voltage V_S

6. Reflow Soldering Profile

Lead Free reflow temperature profile

according to DIN IEC 68000-2-58



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