

# FEATURES

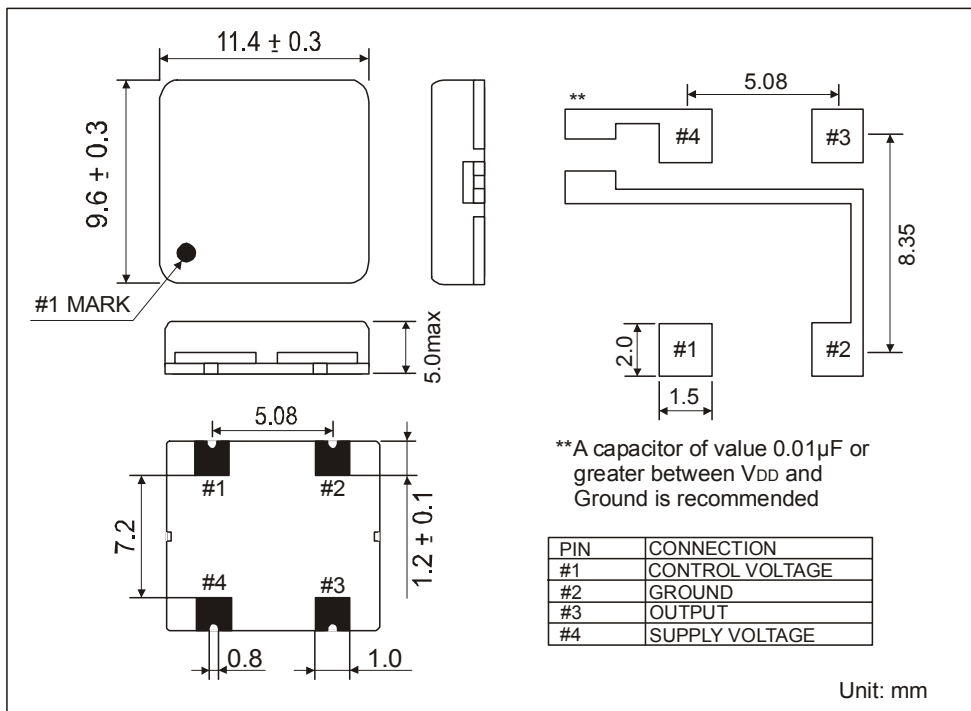
- HIGH RELIABILITY FOR LOW COST
- OPTIMISED FOR SDH/SONET APPLICATIONS
- FREQUENCIES UP TO 200.0 MHz WITH FUNDAMENTAL CRYSTALS IN INVERTED MESA TECHNOLOGY
- EXCELLENT JITTER PERFORMANCE
- EXTENDED TEMPERATURE RANGE UP TO -40/+85°C AVAILABLE
- APPLICATIONS: FIBER CHANEL, GIGABIT ETHERNET, SDH/SONET, BROADBAND, TELECOM, ETC.

SERIES		M7311	
PACKAGE		SMD-PACKAGE 11.4 x 9.6 x 5.0 mm	
FREQUENCY RANGE		120.0 ~ 200.0 MHz	FUNDAMENTAL TECHNOLOGY
	VS. TEMPERATURE	+50 ~ +-100 ppm	
	VS. SUPPLY VOLTAGE	+5 ppm max.	
	VS. LOAD	+1 ppm max.	
	VS. AGING	+5 ppm max. / first year	
OPERATING TEMPERATURE RANGE		-10/+60°C ~ -40/+85°C	
STORAGE TEMPERATURE RANGE		-55/+125°C	
INPUT		VOLTAGE	+3.3 VDC +-5%
		CURRENT	100 mA max.
OUTPUT	SYMMETRY	STANDARD	40/60%
		OPTION	45/55%
	SIGNAL	PECL	
	RISE AND FALL TIME	1.5 ns max. (20% TO 80% PECL)	
	"0" LEVEL	FOR PECL	VDD-1.62 V max.
"1" LEVEL	VDD-1.02 V min.		
	LOAD	50 Ω to VDD-2VDC	
START-UP TIME		10 mS max.	
INPUT IMPEDANCE		50 kΩ min.	
PERIOD JITTER RMS		4 ps typ. @ 155.52MHz	
CONTROL VOLTAGE RANGE STANDARD		0 ~ 3.3 VDC	
CENTER VOLTAGE		1.65 VDC	
PULLABILITY		+50 ppm min.	
LINEARITY		10% max.	
SLOPE		POSITIVE	
PIN CONNECTION		PIN 1	CONTROL VOLTAGE
		PIN 2	CASE GROUND
		PIN 3	OUTPUT
		PIN 4	SUPPLY VOLTAGE
<b>OTHER PARAMETERS ARE AVAILABLE ON REQUEST / CREATE HERE YOUR SPECIFICATION</b>			

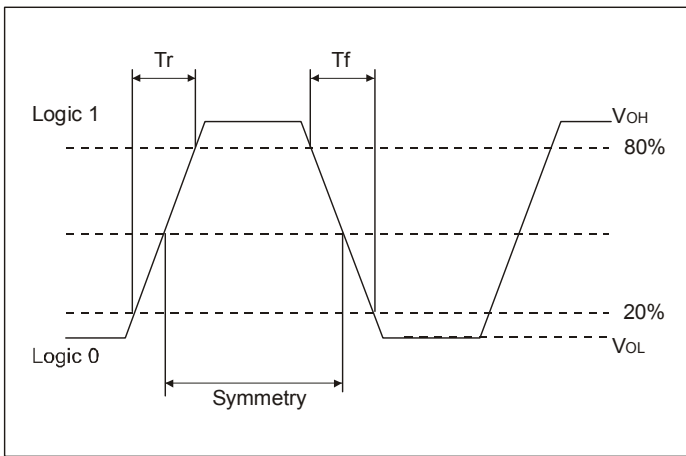
## PART NUMBERING GUIDE

EXAMPLE	M7311-50-W-S-VX3-50-155.52MHz-T
SERIES	M7311
STABILITY VS. TEMPERATURE	BLANK = +/- 100 ppm
	50 = +/-50 ppm
	X = OTHER VALUE - PLEASE INDICATE YOUR REQUIRED VALUE
TEMPERATURE RANGE	BLANK = 0/+70°C
	N = -10/+60°C
	M = -20/+70°C
	W = -40/+85°C
	X = OTHER VALUE - PLEASE INDICATE YOUR REQUIRED VALUE
SYMMETRY	BLANK = 40/60%
	S = 45/55%
CONTROL VOLTAGE	VX3 = 0 ~ 3.3 V
PULLING RANGE	BLANK = +/-100 ppm min.
	50 = +/-50 ppm min.
	IF YOU REQUIRE ANOTHER VALUE PLEASE INDICATE THE REQUIRED VALUE
FREQUENCY	FREQUENCY IN MHz
TAPE AND REEL PACKAGE	-T

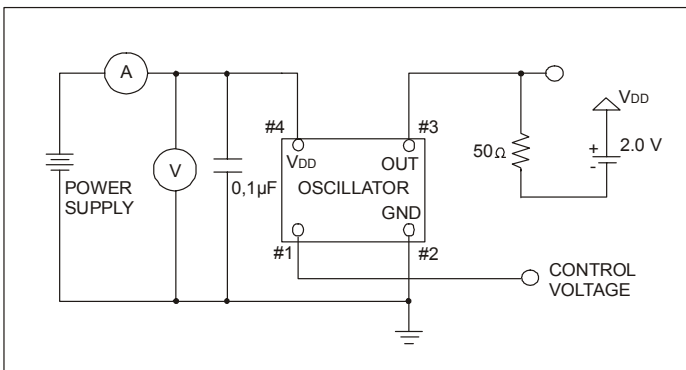
## OUTLINE DRAWING OF M7311



### OUTPUT WAVE FORM OF PECL



### TEST CIRCUIT FOR PECL TYPE M7311



### REFLOW SOLDER PROFILE

