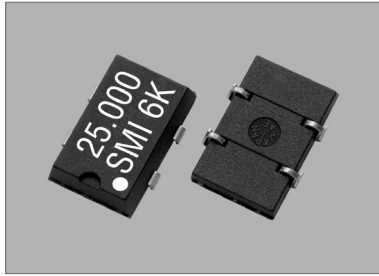


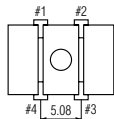
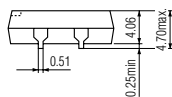
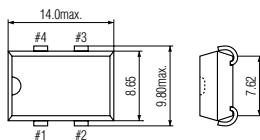
90SMO



Actual Size



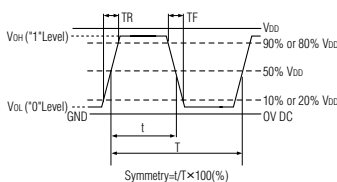
90SMO



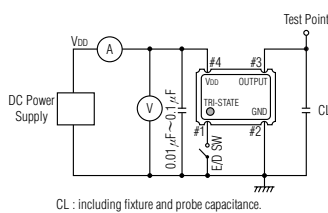
PIN	CONNECTION
1	"L" OPEN or "H"
2	GND
3	Z OUTPUT
4	V _{DD}

Z : high impedance

OUTPUT WAVEFORM



TEST CIRCUIT



CL : including fixture and probe capacitance.

STANDARD SPECIFICATIONS

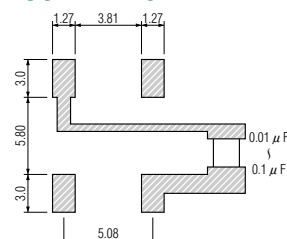
Item	Specifications	
Generic part number	90SMO*	
Frequency range	1.000 MHz to 70.000 MHz	
Frequency stability (-10°C to +70°C) over all conditions	90SMO(3.3VC) : ±100 ppm 90SMO(3.3VD) : ±50 ppm	90SMO(CE) : ±100 ppm 90SMO(CD) : ±50 ppm
Operating Conditions	-10°C to +70°C (Standard) -40°C to +85°C(W)	
Operating temperature		
Input voltage (VDD)	+3.3V DC ±10%	+5V DC ±10%
OE control voltage (Pin#1)	V _{IH} : +2.0V min. (1 MHz to 30 MHz) V _{IL} : +0.8V max. (1 MHz to 30 MHz) V _{IH} : +2.4V min. (30 MHz to 70 MHz) V _{IL} : +0.6V max. (30 MHz to 70 MHz)	V _{IH} : +2.0V min. V _{IL} : +0.8V max.
Absolute Max. Ratings	-0.5V to +7.0V DC -55°C to +125°C	
Supply voltage		
Storage temperature		
Input current (+25°C)	9 mA max. (1 MHz to 30 MHz) 20 mA max. (30 MHz to 70 MHz)	23 mA max. (1 MHz to 30 MHz) 35 mA max. (30 MHz to 70 MHz)
Output (-10°C to +70°C)	40% to 60% at 50%VDD level	
Symmetry		
Rise and fall times	6 ns max. (20%VDD to 80%VDD level)	8 ns max. (10%VDD to 90%VDD level)
"0" level	V _{OL} : 10%VDD max.	V _{OL} : 0.4V max.
"1" level	V _{OH} : 90%VDD min.	V _{OH} : 90%VDD min.
Load	30 pF max. (CMOS)	50 pF max. (CMOS)
Enable / Disable delay time	100 ns max.	
Disable current	5 mA max. (1 MHz to 30 MHz) 15 mA max. (30 MHz to 70 MHz)	12 mA max. (1 MHz to 30 MHz) 28 mA max. (30 MHz to 70 MHz)
Startup time	10 ms max.	
Aging	±5 ppm max. at +25°C ±3°C for first year	
Reflow condition	+250°C ±10°C for 10 seconds +170°C ±10°C for 1 to 2 minutes (preheating)	

(※1) Final exact part number to be determined with frequency, frequency stability and input voltage.
e.g. 90SMO(3.3VD) 25.000 MHz.

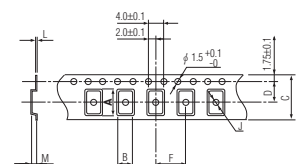
PACKAGE DATA

Item	Package	90SMO
Outer package		Plastic
Sealing		Press-fit (3x9mm built-in)
Terminal lead frame		42 alloy
Terminal plating		SnPb (Pb : 1mg max)
RoHS		Compliant

SOLDERING PATTERN



TAPE SPECIFICATIONS



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
14.3	10.1	24.0	11.5	12.0	1.6	0.4	5.0	330	1000pcs