

# PLASTIC MOLD 5.0V SMD OSCILLATORS

# NEW

## SDH ·SDT ·SDR

### FREQUENCY STABILITY

MODEL	FREQUENCY STABILITY
SD1H1E ·SD1T1E ·SD1R1E	±100PPM/0 ~ +70°C
SD2H1E ·SD2T1E ·SD2R1E	± 50PPM/0 ~ +70°C
SD1H1R ·SD1T1R ·SD1R1R	±100PPM/-40 ~ +85°C

### OPERATING CONDITIONS

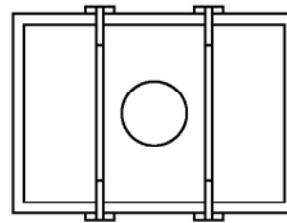
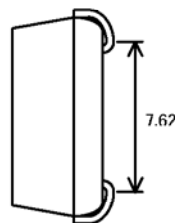
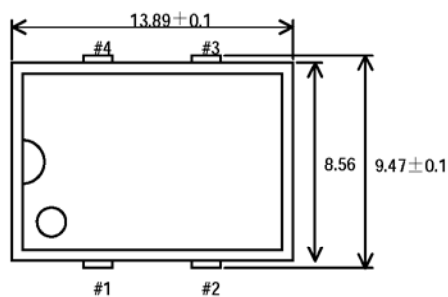
Operating Temperature	0 ~ +70°C, -40 ~ +85°C
Storage Temperature	-55 ~ +125°C
Supply Voltage (VDD)	+5.0V±0.5V

### ELECTRICAL CHARACTERISTICS (Ta=+25°C, VDD=5.0V)

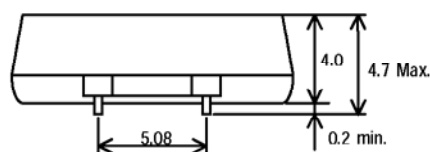
PARAMETERS	CONDITIONS	FREQUENCY RANGE (MHz)	SPECIFICATIONS		
			SDH	SDT	SDR
Output Level		1.500 ~ 75.000	TTL/CMOS	TTL	CMOS
Frequency Range (MHz)			30.000 ~ 75.000	1.500 ~ 70.000	1.500 ~ 70.000
Input Current (IDD)		1.500 ~ 10.000	-----	10mA Max.	10mA Max.
		10.000 <sup>+</sup> ~ 26.000	-----	15mA Max.	15mA Max.
		26.000 <sup>+</sup> ~ 50.000	40mA Max.	35mA Max.	35mA Max.
		50.000 <sup>+</sup> ~ 75.000	60mA Max.	50mA Max.	50mA Max.
Frequency Stability	All conditions (Note)	1.500 ~ 75.000	±50PPM ~ ±100PPM		
Symmetry	@50%VDD @1.4V	1.500 ~ 75.000	40/60% 40/60%	----- 45/55%	45/55% -----
Output Voltage (VOL) (VOH)	"0" Level	1.500 ~ 75.000	0.4V Max. VDD-0.4V Min.	0.4V Max. 4.0V Min.	0.4V Max. VDD-0.4V Min.
	"1" Level				
Rise & Fall Time (TR/TF)	10% ~ 90% VDD or 0.4V ~ 2.4V	1.500 ~ 26.000	-----	5ns Max.	12ns Max.
		26.000 <sup>+</sup> ~ 50.000	7ns Max.	5ns Max.	10ns Max.
		50.000 <sup>+</sup> ~ 75.000	7ns Max.	5ns Max.	6ns Max.
Driving Ability	TTL	1.500 ~ 60.000	10 TTL Max.	10 TTL Max.	-----
		60.000 <sup>+</sup> ~ 75.000	10 TTL Max.	5 TTL Max.	-----
	CMOS	1.500 ~ 26.000	50pF Max.	-----	50pF Max.
		26.000 <sup>+</sup> ~ 50.000	50pF Max.	-----	30pF Max.
		50.000 <sup>+</sup> ~ 75.000	50pF Max.	-----	15pF Max.
Enable/Disable Input Voltage (VIL) (VIH)		1.500 ~ 75.000	+0.8V Max. +2.0V Min.	+1.5V Max. +3.5V Min.	+1.5V Max. +3.5V Min.

Note: Inclusive of 25°C tolerance, operating temperature range, input voltage change.

### DIMENSIONS (mm)



Pin Connections	
#1	E/D
#2	GND
#3	OUT
#4	VDD



RECOMMENDED  
SOLDER PAD LAYOUT

