





























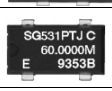
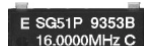






OSCILLATOR


CRYSTAL OSCILLATOR










► SPXO

Page	Category	Actual size (mm)	Frequency							
			1 Hz	1 MHz	50 MHz	100 MHz	500 MHz	800 MHz		
27	SG-3050BC NEW		2.2×1.4×1.0 t (Max.)							
28	SG-3030JC SG-3040JC		10.5×5.8×2.7 t (Max.)		● 32.768 kHz					
	SG-3030JF		7.1×5.1×1.5 t (Max.)							
	SG-3030LC SG-3040LC		3.6×2.8×1.2 t (Max.)							
29	SG-150 S*E		2.1×1.7×0.75 t (Typ.)		3 MHz		54 MHz			
30	SG-211 S*E		2.5×2.0×0.7 t (Typ.)		2.375 MHz		60 MHz			
31	SG-210 S*B		2.5×2.0×0.8 t (Typ.)		2 MHz		60 MHz			
32	SG-210 S*D		2.5×2.0×0.8 t (Typ.)			50 MHz		80 MHz		
33	SG-310 series		3.2×2.5×1.05 t (Typ.)		2 MHz		80 MHz			
34	SG-550 series		5.0×3.2×1.2 t (Max.)		2 MHz		48 MHz			
35	TCO-710x series		5.0×3.2×1.0 t (Typ.)		1.5 MHz		75 MHz			
35	SG-770 series		7.0×5.0×1.6 t (Typ.)			50 MHz		230 MHz		
36	SG-771 PCD		7.0×5.0×1.6 t (Typ.)			50 MHz		175 MHz		
37	TCO-708x series		7.0×5.0×1.6 t (Typ.)		1.5 MHz		160 MHz			
38_39	SG-645 series		7.1×5.1×1.5 t (Max.)		32.001 MHz		135 MHz			
	SG-636 series		10.5×5.8×2.7 t (Max.)		2.21675 MHz		135 MHz			
40_41	SG-615 series		14.0×9.8×4.7 t (Max.)		1.025 MHz		135 MHz			
	SG-531 series		DIP half size							
	SG-51 series		DIP full size		1.025 MHz		66.667 MHz			

► Programmable

Page	Category	Package lineup	Frequency						
			1 Hz	1 MHz	50 MHz	100 MHz	500 MHz	800 MHz	
42_43	SG-8003 series	BA ,CE ,LB ,JF ,CA	1.0 MHz				166 MHz		

Page	Category	Package lineup	Frequency						
			1 Hz	1 MHz	50 MHz	100 MHz	500 MHz	800 MHz	
44_48	SG-8002 series	CE, LB ,JF ,CA ,JC ,JA ,DC ,DB	1.0 MHz				125 MHz		




Type	BA	CE	LB	JF	CA	JC	JA	DC	DB
Actual size (mm)	2.1×1.7 0.75 t (Typ.)	3.2×2.5 1.05 t (Typ.)	5.0×3.2 1.2 t (Max.)	7.1×5.1 1.5 t (Max.)	7.0×5.0 1.4 t (Typ.)	10.5×5.8 2.7 t (Max.)	14.0×9.8 4.7 t (Max.)	DIP half size	DIP full size
									

49	SG-8002 series Outline of Specifications
50	SG-8002 series Jitter specifications and characteristics chart
51	SG-8000 series Programming Tool













OSCILLATOR CRYSTAL OSCILLATOR


► Spread Spectrum

Page	Category	Actual size (mm)		Frequency						
				1 Hz	1 MHz	50 MHz	100 MHz	500 MHz	800 MHz	
52	SG-9001 LB		5.0x3.2x1.2 t (Max.)	10 MHz				135 MHz		
	SG-9001 CA		7.0x5.0x1.4 t (Typ.)	10 MHz				166 MHz		
	SG-9001 JC		10.5x5.8x2.7 t (Max.)	10 MHz				166 MHz		

► Low-jitter SAW

Page	Category		Actual size (mm)		Frequency							
					1 Hz	1 MHz	50 MHz	100 MHz	500 MHz	800 MHz		
53	XG-1000CA			7.0x5.0x1.2 t (Typ.)			50 MHz			170 MHz		
	XG-1000CB			5.0x3.2x1.1 t (Typ.)			50 MHz			170 MHz		
54	EG-2021CA (2.5 V CMOS)			7.0x5.0x1.2 t (Typ.)			62.5 MHz			250 MHz		
	EG-2001CA (3.3 V CMOS)			7.0x5.0x1.2 t (Typ.)				106.25 MHz		170 MHz		
55	EG-2002CA (3.3 V LV-TTL)			7.0x5.0x1.2 t (Typ.)			62.5 MHz			170 MHz		
56_57	EG-2121CA	Differential LV-PECL		7.0x5.0x1.2 t (Typ.)			53.125 MHz			500 MHz		
		LVDS					53.125 MHz			700 MHz		
		HCSL					100 MHz			350 MHz		
	EG-2102CA	Differential LV-PECL		7.0x5.0x1.2 t (Typ.)				100 MHz			700 MHz	
		LVDS					53.125 MHz			700 MHz		
		HCSL					100 MHz			350 MHz		
58	EG-2101CA (3.3 V Differential LV-PECL)			7.0x5.0x1.2 t (Typ.)			62.5 MHz			99.999 MHz		
59_60	EG-4101CA (3.3 V)	Differential LV-PECL		7.0x5.0x1.2 t (Typ.)				100 MHz			625 MHz	
		LVDS					100 MHz			500 MHz		
		HCSL					100 MHz			350 MHz		
	EG-4121CA (2.5 V)	Differential LV-PECL		7.0x5.0x1.2 t (Typ.)				100 MHz			625 MHz	
		LVDS					100 MHz			500 MHz		
		HCSL					100 MHz			350 MHz		

► High-stability










Page	Category		Actual size (mm)		Frequency						
					1 Hz	1 MHz	50 MHz	100 MHz	500 MHz	800 MHz	
61	HG-2150CA			7.0x5.0x1.5 t (Max.)		1 MHz			60 MHz		










OSCILLATOR

CRYSTAL OSCILLATOR / RUBIDIUM ATOMIC OSCILLATOR

► VCXO

Page	MODEL	Actual size (mm)	Frequency					
			1 Hz	1 MHz	50 MHz	100 MHz	500 MHz	800 MHz
62	VG-4231CE	 3.2×2.5×1.05 t (Typ.)	3 MHz		60 MHz			
63	VG-4231CB	 5.0×3.2×1.2 t (Typ.)	1 MHz		60 MHz			
	VG-4531CB	 5.0×3.2×1.2 t (Typ.)		60 MHz		125 MHz		
64	VG-4231CA	 7.0×5.0×1.4 t (Typ.)	1 MHz		60 MHz			
65	VG-4501/4502CA	 7.0×5.0×1.6 t (Typ.)		60 MHz		125 MHz		
66	VG-4512CA	 7.0×5.0×1.6 t (Typ.)		70 MHz		200 MHz		
67	TCO-291J	 11.4×9.6×5.0 t (Max.)		60 MHz		230 MHz		
68_69	TCO-2000 series	 13.9×9.8×4.7 t (Max.)		60 MHz		125 MHz		
	TCO-2100 series	 13.9×9.8×4.7 t (Max.)		60 MHz				800 MHz

► TCXO

Page	MODEL	Actual size (mm)	Frequency			
			1 Hz	1 MHz	50 MHz	100 MHz
70	TG-3530SA	 10.1×7.4×3.2 t (Typ.)	● 32.768 kHz			
71	TG-5021BA	 2.1×1.7×0.75 t (Typ.)		13 MHz		52 MHz
72	TG-5021CG	 2.5×2.0×0.8 t (Typ.)		13 MHz		52 MHz
73	TG-5025CG	 2.5×2.0×0.8 t (Typ.)		13 MHz		52 MHz
74	TG-5005CE	 3.2×2.5×0.9 t (Typ.)		10 MHz		40 MHz
75	TG-5010LH	 3.3×2.5×0.96 t (Typ.)		10 MHz		40 MHz
76	TCO-5860 series	 3.2×2.5×0.9 t (Typ.)		10 MHz		40 MHz

► OCXO

Page	MODEL	Size (mm)	Weight (Max.)	Frequency			
				1 Hz	1 MHz	50 MHz	100 MHz
77	TCO-6760 series	25.4×25.4×12.7 t (Max.)	20 g		10 MHz		20 MHz
78	TCO-679 series	20.3×12.7×9.7 t (Typ.)	10 g		10 MHz		20 MHz
79	TCO-6920A	50.8×50.8×25.4 t (Max.)	100 g		● 10 MHz		
80	OX-6501GG series	25.4×22×12.1 t (Typ.)	20 g		10 MHz		40 MHz
81	OX-6502GG series	25.4×22×7.8 t (Typ.)	20 g		10 MHz		40 MHz

► Rubidium Atomic oscillator

Page	MODEL	Size (mm) Typ.	Weight (Typ.)	Frequency			
				1 Hz	1 MHz	50 MHz	100 MHz
82	Rb-3310N	89(H)×110(W)×123(D)	2 kg		● 10 MHz		
83	Rb-2110CB	99(H)×480(W)×350(D)	12 kg	●	● ● ● 100 kHz, 1 MHz, 3.58 MHz, 10 MHz		