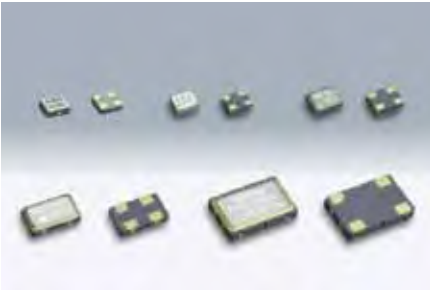


表面実装型水晶発振器

DSO211AB/DSO221SBM, DSO321SBM/SBN/SVN, DSO531SBM/SBN/SVN, DSO751SBM/SBN/SVN



原寸大 DSO211AB □ DSO221SBM □ DSO321SBM/SBN □
DSO531SBM/SBN □ DSO751SBM/SBN □

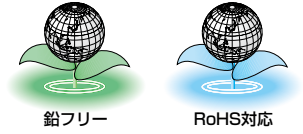
■ 特長

- 低消費電流 (5Vタイプ DSO211AB, DSO***SBM/SBN)
(3.3Vタイプ DSO***SVN)
- スリープ状態機能付き
- DSO211AB, DSO***SBM: 5V汎用タイプ発振器
- DSO***SBN/SVN: 1ゲートドライブ専用発振器、
軽負荷用に出力波形を最適化

■ 用途

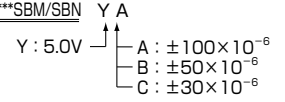
- PC、周辺機器、映像機器、FA機器など

[型名]		
DSO211AB		2016サイズ
DSO221SBM		2520サイズ
DSO321SBM/SBN/SVN		3225サイズ
DSO531SBM/SBN/SVN		5032サイズ
DSO751SBM/SBN/SVN		7349サイズ

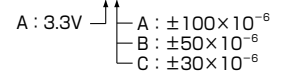


[特性コード]

DSO211AB, DSO***SBM/SBN



DSO***SVN



ご用命の際は型名以外に特性コード (例 YA) までご指定下さい。

■ 一般仕様

項目	記号	特性コード		DSO211AB/DSO221SBM			DSO321, 531, 751 SBM/SBN/SVN			単位	条件		
		電源電圧	周波数許容偏差	出力周波数範囲 (MHz)	min.	Typ.	max.	出力周波数範囲 (MHz)	min.			Typ.	max.
電源電圧	V _{cc}	Y	*	3.25 ≤ fo ≤ 52	+4.5	+5.0	+5.5	0.7 ≤ fo ≤ 90	+4.5	+5.0	+5.5	V	DSO***SBM/SBN
周波数許容偏差 (常温偏差含む)	f _{tol}	A	*	-	-	-	-	-	+3.0	+3.3	+3.6	V	DSO***SVN
		*	A	3.25 ≤ fo ≤ 52	-100	-	+100	0.7 ≤ fo ≤ 90	-100	-	+100	X10 ⁻⁶	-40~+85°C
		*	B	3.25 ≤ fo ≤ 52	-50	-	+50	0.7 ≤ fo ≤ 90	-50	-	+50		-10~+70°C
		*	C	3.25 ≤ fo ≤ 52	-30	-	+30	0.7 ≤ fo ≤ 54	-30	-	+30		(標準動作温度範囲)
消費電流	I _{cc}	Y	*	3.25 ≤ fo ≤ 52	-	-	8.0	0.7 ≤ fo < 32	-	-	4.0	mA	DSO***SBM/SBN No Load
		A	*	-	-	-	-	32 ≤ fo < 54	-	-	6.0		
								54 ≤ fo < 90	-	-	8.0		
								0.7 ≤ fo < 32	-	-	2.0		
スタンバイ時電流 (#1ピンL)	I _{std}	*	*	*	-	-	50	*	-	-	50	μA	
出力負荷	L _{CMOS}	*	*	*	-	-	30	*	-	-	30	pF	DSO***SBM
		*	*	*	-	-	-	*	-	-	15		DSO***SBN/SVN
波形シメトリ	SYM	*	*	fo < 26	45	50	55	fo < 26	45	50	55	%	50% V _{cc} Level
		*	*	fo ≥ 26	40	50	60	fo ≥ 26	40	50	60		
0レベル電圧	VoL	*	*	*	-	-	V _{cc} × 0.1	*	-	-	V _{cc} × 0.1	V	
1レベル電圧	VoH	*	*	*	V _{cc} × 0.9	-	-	*	V _{cc} × 0.9	-	-	V	
立ち上がり時間	tr	*	*	3.25 ≤ fo ≤ 52	-	-	10	0.7 ≤ fo ≤ 54	-	-	7 (6)	ns	DSO***SBM (20~80% V _{cc} Level) L _{CMOS} : 30pF 10~90% V _{cc} Level DSO***SBN/SVN (20~80% V _{cc} Level) L _{CMOS} : 15pF 10~90% V _{cc} Level
		*	*	-	-	-	-	54 < fo ≤ 90	-	-	5 (4)		
		*	*	-	-	-	-	0.7 ≤ fo ≤ 54	-	-	8 (7)		
		*	*	-	-	-	-	54 < fo ≤ 90	-	-	5 (4)		
立ち下り時間	tf	*	*	-	-	-	-	-	-	-			
OE端子0レベル入力電圧	ViL	*	*	*	-	-	V _{cc} × 0.2	*	-	-	V _{cc} × 0.2	V	
OE端子1レベル入力電圧	ViH	*	*	*	V _{cc} × 0.8	-	-	*	V _{cc} × 0.8	-	-	V	
出力デイスエーブル時間	tPLZ	*	*	*	-	-	150	*	-	-	150	ns	
出力カインエーブル時間	tPZL	*	*	*	-	-	5	*	-	-	1	ms	
ピリオド ジッタ (1)	tRMS	*	*	*	-	2.5	-	*	-	2.5	-	σ	
ピークピーク	tp-p	*	*	*	-	20	-	*	-	20	-	σ	Peak to peak
トータル ジッタ (1)	tTL	*	*	*	-	35	-	*	-	35	-	ps	tDJ + tRJ (n=14.1) (BER=1×10 ⁻¹⁵) (2)
位相ジッタ	tpj	*	*	40 ≤ fo ≤ 52	-	-	1	40 ≤ fo ≤ 90	-	-	1	ps	fo offset: 12kHz~20MHz
				10 ≤ fo < 40	-	-	-	10 ≤ fo < 40	-	-	-	ps	fo offset: 12kHz~5MHz
梱包単位		DSO211AB/DSO221SBM, DSO321SBM/SBN/SVN: 2000pcs./reel (φ180), DSO531SBM/SBN/SVN: 1000pcs./reel (φ180), DSO751SBM/SBN/SVN: 1000pcs./reel (φ254)											

(1) WAVECREST DTS-2075にて測定。

(2) tDJ: Deterministic jitter tRJ: Random jitter

その他の仕様、または特殊仕様については営業窓口にお問い合わせください。

■ 外形寸法 [mm]

DSO211AB 型名コード: B	DSO221SBM 型名コード: B	DSO321SBM/SBN/SVN	DSO531SBM/SBN/SVN	DSO751SBM/SBN/SVN																																																																																																																													
<p>外形寸法: 2.0 ± 0.12 (B), 1.6 ± 0.12 (D), 0.72 ± 0.08 (H)</p> <p>ピン間隔: 0.95 (P), 0.45 (P)</p> <p>ランド径: 0.9 (L)</p>	<p>外形寸法: 2.5 ± 0.15 (B), 2.0 ± 0.15 (D), 0.815 ± 0.08 (H)</p> <p>ピン間隔: 1.25 (P), 0.68 (P)</p> <p>ランド径: 1.0 (L)</p>	<p>外形寸法: 3.2 ± 0.15 (B), 2.5 ± 0.15 (D), 1.1 (H)</p> <p>ピン間隔: 2.1 (P), 1.65 (P)</p> <p>ランド径: 1.2 (L)</p>	<p>外形寸法: 5.0 ± 0.2 (B), 3.2 ± 0.2 (D), 1.15 (H)</p> <p>ピン間隔: 2.54 (P), 2.10 (P)</p> <p>ランド径: 1.4 (L)</p>	<p>外形寸法: 7.3 ± 0.2 (B), 4.9 ± 0.2 (D), 1.8 ± 0.2 (H)</p> <p>ピン間隔: 5.08 (P), 3.65 (P)</p> <p>ランド径: 1.8 (L)</p>																																																																																																																													
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