

# MEMS vs. Crystal MultiVolt™ Oscillators



Technology	MEMS	Advantage	MultiVolt™	Advantage
Part Number/ Description	ASDAMB-25.000MHz-XY-T <sup>(1)</sup> 2.5 x 2.0mm, ±10ppm, -40°C ~ +105°C	ECS-2520SMV-250-FP-TR <sup>(2)</sup> 2.5 x 2.0mm, ±10ppm, -40°C ~ +105°C		▲
		ECS-2520MV-250-GP-TR <sup>(3)</sup> 2.5 x 2.0mm, ±5ppm, -40°C ~ +105°C		▲
Vendor	Abracon		ECS Inc. International	
Manufacturing Technology	Silicon MEMS		Crystal / ASIC	
Operating Temp. Compensation	-40°C ~ +105°C		-40°C ~ +105°C	
Technical Comps	Operating Temp. Range	Blank: 0°C ~ +70°C E: -20°C ~ +70°C L: -40°C ~ +85°C X: -40°C ~ +105°C	N: -40°C ~ +85°C P: -40°C ~ +105°C	▲
	Current	16mA Max.	10mA Max.	▲
	Standby Current	15uA Max.	10uA Max.	▲
	Voltage Range	+1.8V to +3.3V	+1.6V to +3.63V	▲
	Jitter	5pS to 10pS (Max) Period Jitter (1.7pS) Phase Jitter 12KHz-20MHz	1pS (Max) Phase Jitter 12KHz-20MHz	▲
	Rt/Ft	2-3nS (Max)	7nS (Max)	
	Aging	±5ppm / 1 <sup>st</sup> Year	Stability Inclusive of Aging	▲
	Output Load	15/25 or 40pF	15pF	▲
	Resistance to Shock	High Shock	N/A	▲
	Supply Base	Narrow	Wide	▲
Price Comparison*	1,000 - \$1.957 <sup>(1)</sup>		1,000 - \$0.98 <sup>(2)</sup> 1,000 - \$1.22 <sup>(3)</sup>	▲

\*Price comparison completed 12<sup>th</sup> Aug 2020