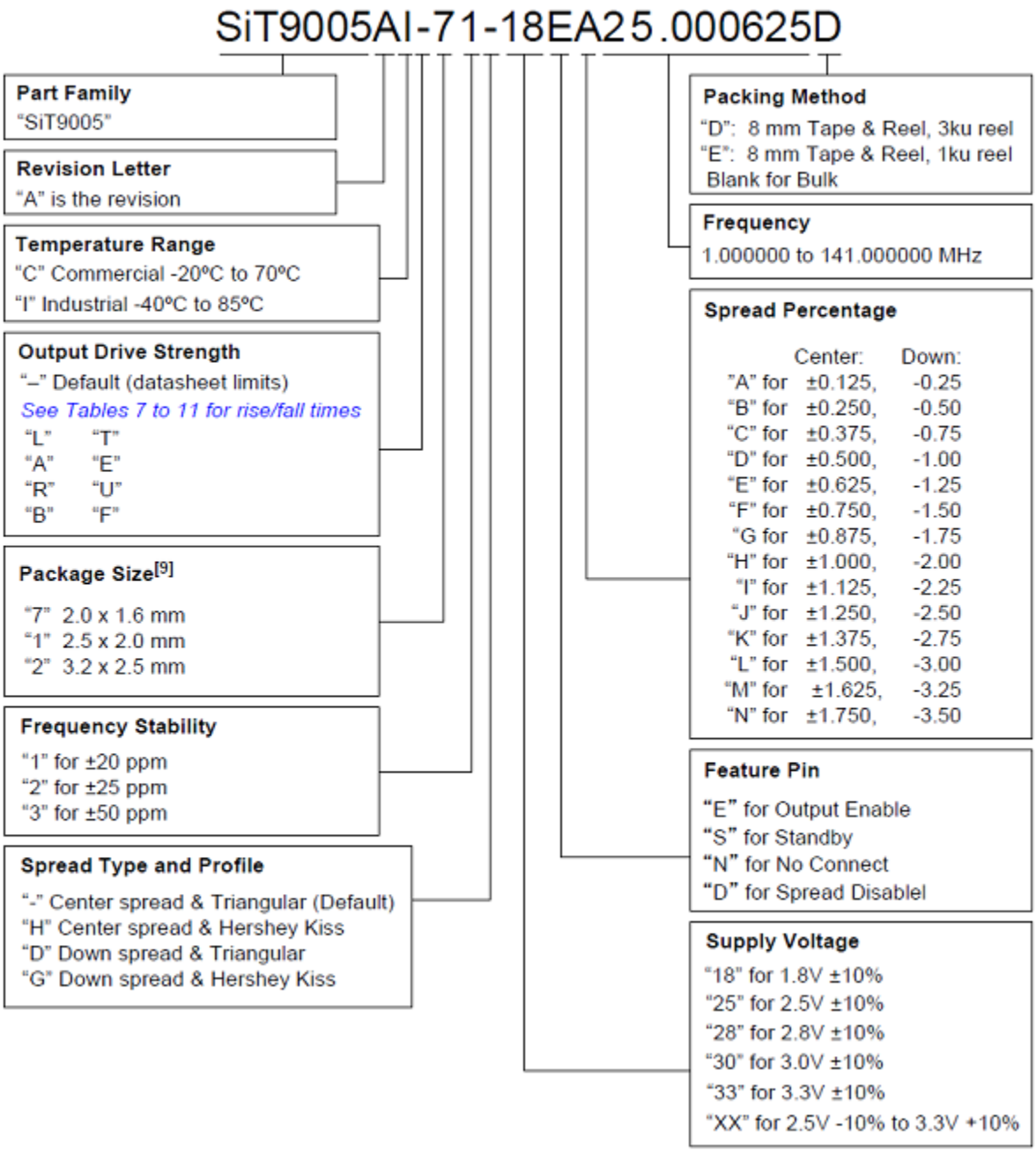
SiT9005: 1 to 141 MHz EMI Reduction Oscillator

- Up to 30 dB reduction for Class A/B compliance
- Plug-and-play solution without design changes
- Field programmable for instant validation

The SiT9005 enables system designers to quickly and easily achieve Class A/B compliance by leveraging a combination of spread spectrum modulation and FlexEdge™, a unique feature that adjusts the rise/fall time. These devices are supported by SiTime's Time Machine II programmer enabling designers to instantly experiment with different EMI levels to achieve optimal system performance.

Frequency Range (MHz)	1 to 141
Temp Range (°C)	-20 to +70, -40 to +85
Frequency Stability (ppm)	±20, ±25, ±50
Supply Voltage (V)	1.8, 2.5 to 3.3
Spread Percentage (%)	
Center spread (%)	±0.125 to ±1.750
Down spread (%)	-0.25 to -3.50
Spread Profile	Triangular, Hershey-Kiss
FlexEdge Slew Rate (Configurable rise/fall time)	8 options, 0.25 to 40 ns
Package LxWxH (mm)	2.0x1.6x0.75, 2.5x2.0x0.75, 3.2x2.5x0.75
Pin1 function mode	Spread disable, Output enable, Standby, No connect

Status	Production in July	
Applications	Printers Flat panal drivers PCIe	Industrial motor High speed flat panel serial link
Features		**Benefits**
Flexible EMI reduction options o Wide spread range: center spread up to ±1.75%, down spread down to -3.5% o Configurable rise/fall time: 8 options o Configurable spread profile: Triangular or Hershey-Kiss		Up to 17dB EMI reduction on carrier frequency and 30 dB on harmonics
Instant programmability by SiTime Time Marchine II programmer		Zero sample lead time. Ensure fastest time-to-market
Four Industry standard package		100% drop-in replacement of oscillators Enables EMI reduction without board re-design, metal housing or other expensive EMI reduction methods
Industry's smallest package 2.0 x 1.6		Save board space for space hungry applications
World best cycle to cycle jitter 8.5 ps		Minimize impact to system timing budget
Extensive programmability o Any frequency between 1 to 144 MHz with 6 decimal place accuracy o Supply voltage of 1.8V and 2.5 to 3.3V o Frequency stability from ±20PPM to		



Note:
9. Contact SiTime for SOT23 (2.9 x 2.8 mm2) package.