



# SPACE-GRADE INDUCTORS & TRANSFORMERS

## YOUR TRUSTED SOURCE FOR CUSTOM SOLUTIONS

Vanguard Electronics has over 70 years of experience designing and manufacturing high-reliability inductors and transformers, establishing refined procedures to guarantee the highest quality and most reliable parts to meet requirements of **MIL-STD-981**, **EEE-INST-002** and **TOR**.

### KEY OFFERINGS

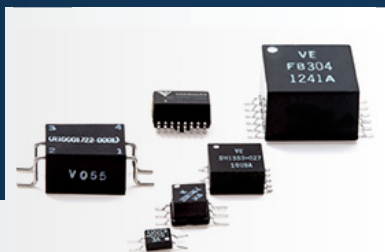
- Standard catalog or custom products
- Materials used meet ASTM E595 outgassing requirements
- Power from low mW to kW
- Frequencies from 50Hz to 6GHz
- Temperature range from -55°C to +200°C
- Build-to-print or bringing a conceptual design to reality

### SPECIFICATIONS SUPPORTED

- **MIL-STD-981**
- **MIL-PRF-27**
- **AS9100**
- **AEROSPACE TOR**
- **ESA**
- **EEE-INST-002**
- **CUSTOM / SCD**
- **QPL OFFERING**

# HIGH-RELIABILITY MAGNETICS

Throughout the years, Vanguard Electronics has proven itself as a leading source of magnetics for the space industry with standard and custom inductors and transformers designed-in on hundreds of space programs.



## PULSE & DATA BUS

- QPL: MIL-PRF-21038/27
- MIL-STD-1553
- Military, Commercial, Space Grade options
- Custom & SCD



## POWER MAGNETICS

- High power density
- Low core & copper losses
- Efficient thermal management
- Power levels to 10kW+, voltages to 40kV+
- Temperature range from -55°C to +200°C



## RF & MICROWAVE

- Air cores, chip inductors, wideband transformers
- Achieving electrical characteristics to 3 GHz+
- QPL, space, COTS+, & custom solutions
- Gullwing, surface mount, thru-hole, radial, flying lead mounting options

	CATALOG	CUSTOM
RF INDUCTORS	S SERIES	✓
RF BEADS	RFB/SRFB	✓
RF WIDEBAND BALUN	S SERIES, SUWB, SXB	✓
POWER INDUCTORS	S60K, S62K, SPL24, SPL25, SPL33	✓
PLANAR INDUCTORS	SHILO	✓
POWER TRANSFORMERS	S60K, S42K	✓
COMMON MODE TRANSFORMERS	SCM, SCMN	✓
CURRENT SENSE TRANSFORMERS	SCS	✓
FLYBACK TRANSFORMERS	HVFB, FB	✓
GATE DRIVE TRANSFORMERS	SGD	✓
ISOLATION TRANSFORMERS	SIT	✓
PULSE TRANSFORMERS	SPT	✓
CUSTOM DESIGNS		

- Custom tooling, fixtures, & fabrication
- Encapsulation, varnish, impregnation & transfer molding
- Cleanrooms
- Order from low to high volume
- Vertically integrated
- AS9100 & ITAR facilities in California & Mexico
- Advanced environmental laboratory for complete MIL-STD testing

ALL FACILITIES AS9100, ITAR & MIL-STD-981 APPROVED