



**SERVING THE AEROSPACE & DEFENSE
INDUSTRIES SINCE 1967**

SSDI HIGH DENSITY, HIGH PERFORMANCE, & HIGH RELIABILITY PRODUCTS FOR AEROSPACE & DEFENSE

How SSDI Fits Your Needs

Manufacturer of HiRel Discretes, Assemblies and Power Modules since 1967

SSDI
SOLID STATE DEVICES, INC.
www.ssdi-power.com

SSDI QUALITY STANDARDS

JANS Certified ISO 9001 & AS9100

SSDI'S SUPPORT OF MAJOR OEMS

• Astrium EADS	• General Dynamics	• NASA
• BAE	• Hamilton Sundstrand	• Northrop Grumman
• BEL India	• Harris	• NT Space
• Boeing	• Honeywell	• Orbital ATK
• DLA	• IHI / IA Japan	• Raytheon
• EMS	• IAI	• Rockwell Collins
• FAA	• L-3	• Thales / Alenia / Alcatel
• Galileo	• Lockheed Martin	• ComTech
• GE	• MELCO	

SAMPLE OF PROGRAMS SUPPORTED BY SSDI

• A2100	• EFA	• JUNO	• PEGASUS
• AMRAAM	• EUROSTAR	• Longbow	• RADAR SAT
• AEGIS	• F-15, F-16, F-18, F-22, F-35	• MAGELLAN	• SBIRS
• AEHF		• MARS ROVER	• SEA LAUNCH
• AIM-9	• Globalstar	• MILSTAR	• SHUTTLE
• Atlas V	• GOES-R	• OMEGASAT	• SPACE BUS
• DAWN	• H-2A	• ORION	• TELESTAR
• DELTA	• INTELSTAT	• PAC3	• TITAN IV
• EchoStar	• ISS	• Patriot P1	• Tomahawk

WHAT IS YOUR APPLICATION'S OPERATING TEMP?

INDUSTRIAL -45°C TO +85°C	MILITARY -55°C TO +125°C	SPACE -55°C TO +175°C
HERMETIC COTS	MICROELECTRONICS	HV BRIDGES & ASSEMBLIES
RECTIFIERS <ul style="list-style-type: none"> • 25 μs - 5 ns • 16 V - 15 kV • 20 mA - 800 A SCHOTTKYS <ul style="list-style-type: none"> • 500 mA - 600 A • 15 V - 300 V SIC SCHOTTKYS <ul style="list-style-type: none"> • 500 mA - 600 A • 15 V - 2 kV ZENERS <ul style="list-style-type: none"> • 250 mW - 10 W • 2.4 V - 510 V TVS <ul style="list-style-type: none"> • 150 W - 5000 W • 6.7 V - 510 V 	RECTIFIERS <ul style="list-style-type: none"> • 1 A - 120 A, 50 V - 1200 V • 5 μs - 5 ns SCHOTTKYS <ul style="list-style-type: none"> • 500 mA - 600 A, 15 V - 300 V SIC SCHOTTKYS <ul style="list-style-type: none"> • 1 A - 40 A, 300 V - 2 kV SIGNAL JFETS & MOSFETS <ul style="list-style-type: none"> • 100 mW - 5 W, 10 mA - 1 A • 15 V - 100 V POWER MOSFETS <ul style="list-style-type: none"> • 50 W - 300 W, 10 A - 250 A • -200 V - 1 kV POWER IGBTs <ul style="list-style-type: none"> • 50 W - 300 W, 10 A - 200 A • 600 V - 1.8 kV BIPOLAR TRANSISTORS <ul style="list-style-type: none"> • 200 mW - 600 W, 10 mA - 200 A • 10 V - 1 kV 	DOORBELL RECTIFIERS <ul style="list-style-type: none"> • Up to 15 kV and 20 A HV MULTIPLIERS <ul style="list-style-type: none"> • Up to 20 kV and 200 mA HV POWER SUPPLIES <ul style="list-style-type: none"> • Multiple configurations capable of operating up to a 1 kW (2) TWT tube missile application HV MULTIPLE BRIDGES <ul style="list-style-type: none"> • Used for powering TWT's in Airborne applications HV STICK RECTIFIERS <ul style="list-style-type: none"> • Up to 15 kV and 2 A HV ZENERS <ul style="list-style-type: none"> • Reference voltage up to 12.5 kV
POWER MODULES	SSDI SPACE LEVEL RECTIFIERS, SCHOTTKYS, ZENERS, & TVS	MATERIAL TECHNOLOGY <ul style="list-style-type: none"> • Hermetic SMT components • DBC substrate, 8 mil thick copper • Rugged I/O connections • Al/SiC base plate is electrically isolated PERFORMANCE / FEATURES <ul style="list-style-type: none"> • High thermal conductivity • Layout optimized for circuitry and I/O • Thermal stress relief • Application specific solution • Simplifies procurement with single item • Includes power and passive components
	HYBRIDS <ul style="list-style-type: none"> • Full in-house design & prototype capability • Customized functional testing • Combination of hybrid and SMT • Package: hermetic enclosure • Ultrasonic Al wire bonding • Hermetic sealing • Gross & fine leak verification • Screening & processing per MIL-PRF-38534 	MINIATURIZED, SPACE QUALIFIED, HV BRIDGE WITH VOLTAGE MULTIPLIER

SATISFIED WITH YOUR SUPPLIER?

CURRENT SOURCE NO LONGER SUPPLYING YOUR PART? NEED A 2ND SOURCE?	MIN ORDER QTY / LEAD TIME ISSUES?
NEED UNIQUE PARTS?	WIDE RANGE OF PACKAGE OPTIONS
OBSOLESCENCE & SUSTAINMENT SUPPORT	DESIGN CONTROL
IN-HOUSE CAPABILITIES	

SSDI welcomes small quantities and works with customers to accommodate MOQ

SSDI's strong relationships with world-class die foundries and parts suppliers facilitate small production runs and reasonable lead times

SSDI offers cross references for most devices offered by our competitors

Replacements often offer improved performance

Samples / prototypes available

SSDI partners with world-class die foundries

Purchase end of life die stock for long term commitment to your program

Full traceability

Build i.a.w. data sheet, your SCD, or SSDI-generated SCD

Engineering support: upgrade to new package / technology, upgrade electrical performance, etc.

Design

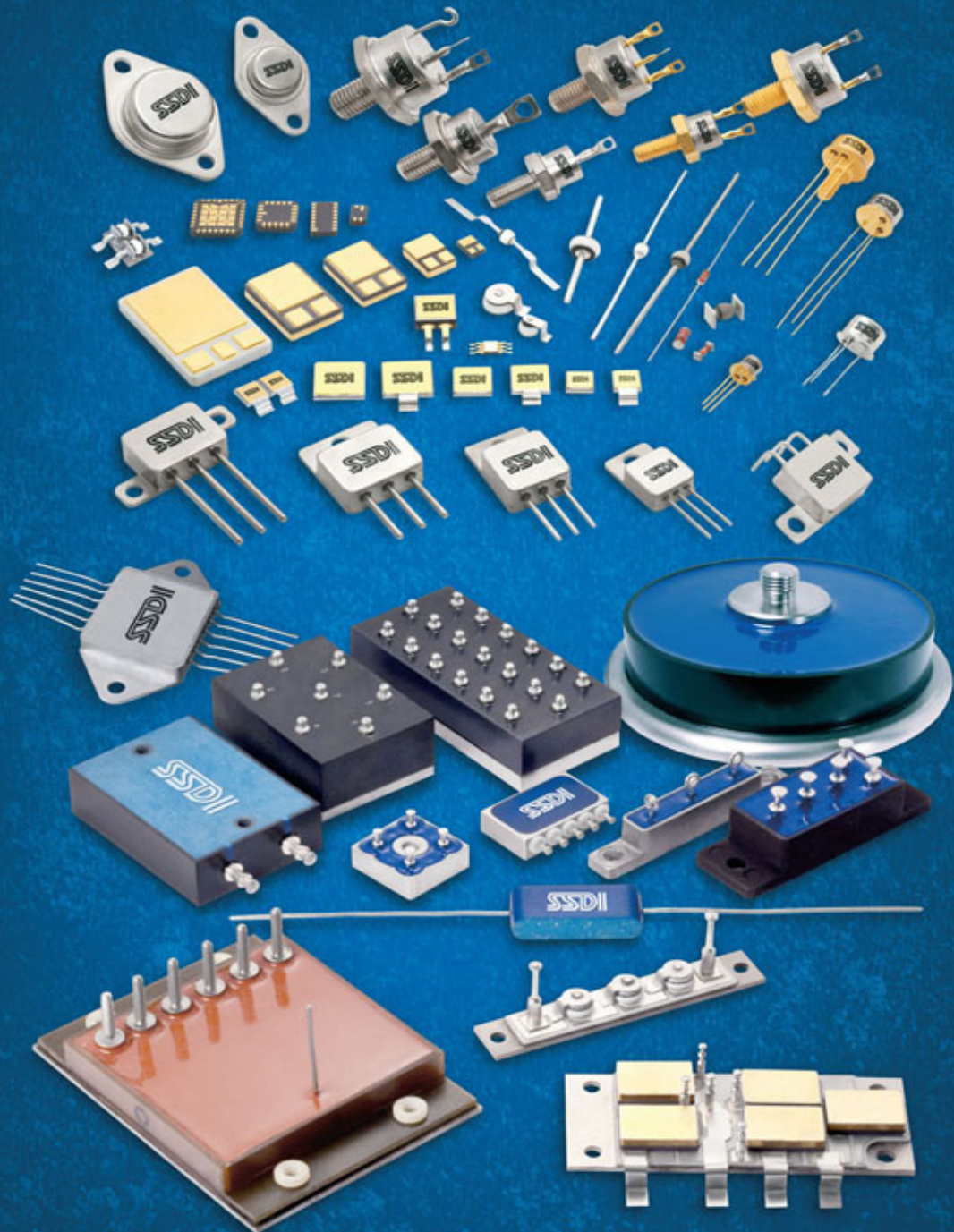
Manufacturing

Testing (TX, TVX, & S level screening based on MIL-PRF-19500)

Wafer Fab

2 JANS certified facilities in La Mirada, California

EXAMPLES OF HERMETIC PACKAGING



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