



YOUR GATEWAY TO CRITICAL ELECTRONICS



DELIVERING EXPERTISE FOR HI-REL ELECTRONICS

Power



Transistors, Diodes, Diodes Bridges, IGBT Modules
Capacitors, Resistors

Protection



EMC Filters, TEMPEST Filters
Lightning TVS, Varistors
Thermistors, Active & Passive Cooling Solutions

High Voltage-RF



HT: Diodes, Optocopleurs, Power supplies
RF: Capacitors, Inductances, Filters, Baluns, Antennas

Sensors



Pression, Vibration, Humidity, Temperature

Lighting



LED components
LED rugged solutions (aero, defense)

Package Options



Power -> 10W 40W 200W 400W
600W 1.5kW 3kW 5kW 10kW 15kW
30kW 45kW 60kW 90kW 350kW

Voltage -> +600V 440V 330V 165V
78V 48V 36V 33V 28V 24V 16V 15V 12V
8V 6V 5V 3.3V 2.8V 2.5V 1.5V

Capacitance +6000pF 1000pF 500pF
200pF 100pF 50pF 15pF 10pF 3pF 1.5pF
0.8pF 0.6pF 0.35pF 0.15pF

TVS products

- TVS Diodes Discretes, Arrays
- Steering Diode Arrays
- Steering Diode/TVS Arrays
- EMI Filter/TVS Arrays
- Flip Chip TVS Arrays

Technical Focus

Package solution : smallest DFN packages to large surface mounts
Electrical solution: Lower Voltage, Lower capacitance, High surge rating, High voltage
Technology: Process yield improvement; Smaller die for cost reduction, new wafer technology Sic
Screening solution, custom design.

Quality

Technology leader with broadest portfolio of TVS products since 1992
R1D team with more than 25 years expertise

Protek Associated with Key Standard Organization:
IEC, IEEC, EIA, ESD Association, Jedec Consultants

Standard compliants :
Military: MIL-STD-704; MIL-STD-1275; MIL-STD-1399; MIL-STD-331
Aerospace: compliant: RCTA/DO-160
Automotive: AEC-Q101
Industrial Automation: IEC 61850
Railway Transportation: IEC 50121-4
Medical: IEC 60601-1-2

CRITICAL SOLUTIONS, PRODUCTS LIST

- Bimetal Switch Wako.
- Capacitors Ceramic Johanson Dielectrics (Hirel*)
- Capacitors Electrolytic, FT Cap Leclanché Capacitors
- Capacitor Films, FT Cap Leclanché
- Capacitor Feedthrough AC & DC , MPE (Hirel)
- Connectors, Sockets, Harnessing, Lotes
- Dies Bare, Semefab, Central-Semi
- Diodes High-Voltage, VMI (Hirel)
- Discrete Semi Conductors custom packaging, Semelab, Central Semi (Hirel)
- EMC / EMP Filters, MPE (Hirel)
- Fans & Cooling Solutions YS Tech
- Inductors, Talema, Easy-Magnet
- LED, Optosupply, Lumex.
- LED Lighting solutions, Aveo Engineering
- Opto-Couplers, Isolink-Skyworks. (Hirel)
- Opto-Couplers High Voltage, VMI (Hirel)
- Opto-Diodes High-Voltage, VMI (Hirel)
- Power Modules custom packaging, Semelab (Hirel)
- Power Supplies High Voltage, VMI (Hirel)
- RF products, Johanson Technology. (Hirel)
- RF Components (Pin diode, Schottky diode, limiter diode), Skyworks. (Hirel)
- RF Transistor custom packaging, Semelab (Hirel)
- Sensor, Varistor, TVT, NTC, PTC, PPTC, Thinking.
- Sensors (Pressure, Temperature, Humidity, Position and Piezo Accelerometer), Betatherm-MEAS-TE
- SELF, Transformer, Talema, Easy-Magnet
- Time Frequency Solution (TCX0-0CX0) GreenRay
- Transient Voltage Suppression Diodes Protek, (Hirel)
- Resistors Film, Caddock (Hirel)
- Resistors Wirewound/Ceramic/Film, Arcol.
- Shunt, Riedon
- Transistor NPN Fast Switching Semelab (Hirel)



*Hirel: High Reliability Solutions for Defense, Aero and Space

VISION 2023: SKY IS THE LIMIT



TECHNICAL EXPERT

CRITICAL AND CUSTOMIZED SOLUTION PROVIDER

FLEXIBLE LOGISTIC PARTNER

INNOVATION PROVIDERS





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