

# **High Reliability Semiconductors**

## **Radiation Hardened By Design**

### **Most Stringent Rad Hard Qualification Program in the Industry!**

- + New Rad Hard by Design (RHBD) Bipolar Technology has solid and proven JANSF ( $\geq 300$  Krad) performance
- + Enhanced Acceptance Criteria:
  - o Larger sample size
  - o Parameter deltas (Group D – Group A)
  - o Acceptance based on 0.99/90% Statistics
- + Low Dose Rate (LDR) Qualified Devices
- + Displacement Damage characterization up to  $2E12$  n/cm<sup>2</sup> (1 MeV)
- + Radiation Test Data Available
- + Customer Specific Products
  - o Packaging
  - o Screening
  - o Radiation Testing



QML by Defense Logistics Agency (DLA)  
MIL-PRF-19500 JANS  
AS9100C with ISO9001:2008 Certified  
ITAR Registered

***“Trusted Everywhere”***

# Semicoa's Rad Hard Bipolar Transistor Product Offering

JANS Part Number & Packages	Polarity	Rad Level	JANS Part Number & Packages	Polarity	Rad Level
2N2218, A, AL	NPN	100 Krad(Si)	2N3735, L	NPN	300 Krad(Si)
2N2219, A, AL	NPN	100 Krad(Si)	2N3737, UB	NPN	300 Krad(Si)
2N2221A, AL, AUA, AUB, AUBC	NPN	300 Krad(Si)	2N3810, L, U	PNP	100 Krad(Si)
2N2222A, AL, AUA, AUB, AUBC	NPN	300 Krad(Si)	2N3811, L, U	PNP	100 Krad(Si)
2N2369A, AUB, AUBC	NPN	300 Krad(Si)	2N3866, A, UB, AUB	NPN	300 Krad(Si)
2N2484, UB, UBC	NPN	300 Krad(Si)	2N4029	PNP	300 Krad(Si)
2N2857, UB	NPN	300 Krad(Si)	2N4033, UB	PNP	300 Krad(Si)
2N2904A, AL	PNP	300 Krad(Si)	2N4261, UB, UBC	PNP	300 Krad(Si)
2N2905A, AL	PNP	300 Krad(Si)	2N4449	NPN	300 Krad(Si)
2N2906A, AL, AUA, AUB, AUBC	PNP	300 Krad(Si)	2N4957, UB	PNP	300 Krad(Si)
2N2907A, AL, AUA, AUB, AUBC	PNP	300 Krad(Si)	2N5151, L	PNP	300 Krad(Si)
2N2919, L	NPN	100 Krad(Si)	2N5152, L	NPN	300 Krad(Si)
2N2920, L	NPN	100 Krad(Si)	2N5153, L	PNP	300 Krad(Si)
2N2946A	PNP	100 Krad(Si)	2N5154, L	NPN	300 Krad(Si)
2N3019, S	NPN	100 Krad(Si)	2N5794UC, AUC	NPN	300 Krad(Si)
2N3057A	NPN	100 Krad(Si)	2N6193	PNP	300 Krad(Si)
2N3634, L, UB	PNP	300 Krad(Si)	2N6987	PNP	300 Krad(Si)
2N3635, L, UB	PNP	300 Krad(Si)	2N6988	PNP	300 Krad(Si)
2N3636, L, UB	PNP	300 Krad(Si)	2N6989	NPN	100 Krad(Si)
2N3637, L, UB	PNP	300 Krad(Si)	2N6990	NPN	100 Krad(Si)
2N3700, UB	NPN	100 Krad(Si)	2N918, UB	NPN	300 Krad(Si)

RHBD Technology

Available in JANTXV+RHA

*Semicoa has the Broadest Rad Hard Product Offering on MIL-PRF-19500!*