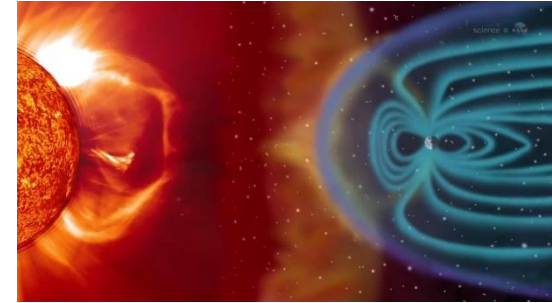


SEMICOA'S RAD HARD BIPOLAR TRANSISTORS

SEMICOA'S INDUSTRY LEADING RADIATION HARDNESS ASSURANCE:

- Larger Sample Size (11 per Bias Condition)
- Acceptance of End Points & Deltas (Group D2-Group A2)
- 0.99/90% KTL Statistical Acceptance
- Radiation Data Freely Available
- Low Dose Rate Qualified Devices

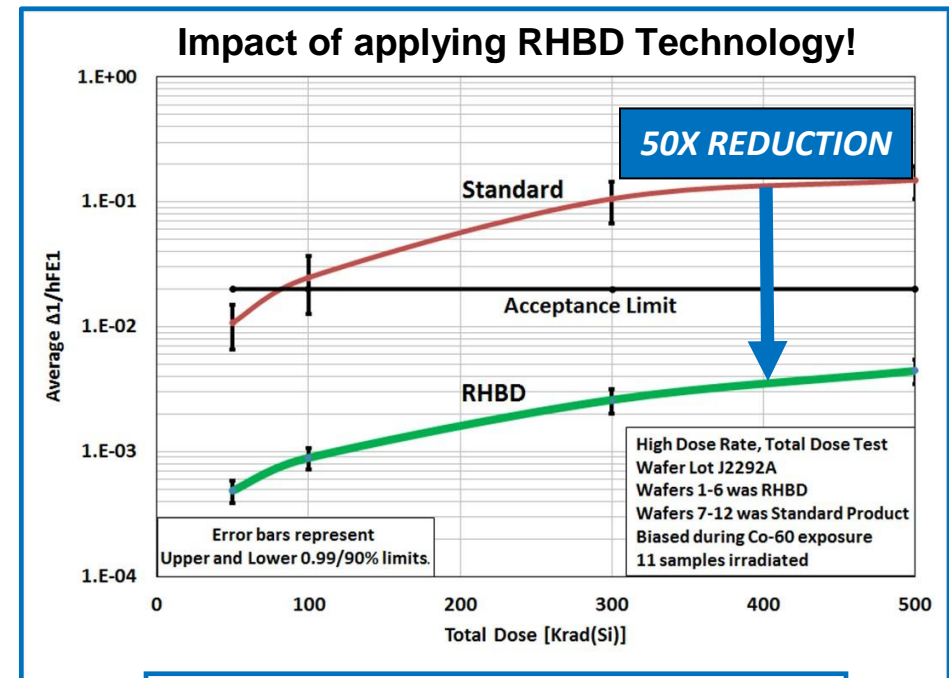


RAD HARD BY DESIGN (RHBD) TECHNOLOGY:

- Dramatic Reduction of Trapped Charge
- Minimizes junction performance from Trapped Charge
- No Low Dose Rate Enhancement
- 50X Reduction in Gain Degradation
- RHBD Technology used for RHA Devices
- No Impact on Displacement Damage response

Semicoa
333 McCormick Avenue
Costa Mesa, CA 92626

Partner Microrel/Protec
Contact Danilo Lauta
danilo.lauta@microrel.com



EAR 99 Classification for export

SEMICOA HAS THE BROADEST MIL-PRF-19500 RAD HARD PRODUCT OFFERING

PART NUMBER & PACKAGES	PLOARITY	RAD LEVEL
2N2218, A, AL	NPN	100 Krad(Si)
2N2219, A, AL	NPN	100 Krad(Si)
2N2221A, AL, AUA, AUB, AUBC	NPN	300 Krad(Si)
2N2222A, AL, AUA, AUB, AUBC	NPN	300 Krad(Si)
2N2369A, AUB, AUBC	NPN	300 Krad(Si)
2N2484, UB, UBC	NPN	300 Krad(Si)
2N2857, UB	NPN	300 Krad(Si)
2N2904A, AL	PNP	300 Krad(Si)
2N2905A, AL	PNP	300 Krad(Si)
2N2906A, AL, AUA, AUB, AUBC	PNP	300 Krad(Si)
2N2907A, AL, AUA, AUB, AUBC	PNP	300 Krad(Si)
2N2919, L, U	NPN	100 Krad(Si)
2N2920, L, U	NPN	100 Krad(Si)
2N2946A	PNP	100 Krad(Si)
2N3019, S	NPN	300 Krad(Si)
2N3057A	NPN	300 Krad(Si)
2N3501, L, UB	NPN	300 Krad(Si)
2N3635, L, UB	PNP	300 Krad(Si)
2N3637, L, UB	PNP	300 Krad(Si)
2N3700, UB	NPN	300 Krad(Si)
2N3735, L	NPN	300 Krad(Si)

PART NUMBER & PACKAGES	PLOARITY	RAD LEVEL
2N3737, UB	NPN	300 Krad(Si)
2N3810, L, U	PNP	100 Krad(Si)
2N3811, L, U	PNP	100 Krad(Si)
2N3866, A, UB, AUB	NPN	300 Krad(Si)
2N4029	PNP	300 Krad(Si)
2N4033, UB	PNP	300 Krad(Si)
2N4261, UB, UBC	PNP	300 Krad(Si)
2N4449	NPN	300 Krad(Si)
2N4957, UB	PNP	300 Krad(Si)
2N5151, L	PNP	300 Krad(Si)
2N5152, L	NPN	300 Krad(Si)
2N5153, L	PNP	300 Krad(Si)
2N5154, L	NPN	300 Krad(Si)
2N5794UC, AUC	NPN	300 Krad(Si)
2N6193	PNP	300 Krad(Si)
2N6987	PNP	300 Krad(Si)
2N6988	PNP	300 Krad(Si)
2N6989	NPN	100 Krad(Si)
2N6990	NPN	100 Krad(Si)
2N918, UB	NPN	300 Krad(Si)

RHA OPTIONS:

- JANTXV or JANS Quality Level
- Low Dose Rate Qualified (ESCC2290 or TM1019)
- Displacement Damage Characterized
- Die (HC & KC) or Package form

*Space qualified,
Space heritage,
Trusted Everywhere
for Mission Success*

