



GRADE COMPARISON

Apex offers two different levels of quality screening: INDUSTRIAL AND MILITARY GRADE. Both grades are produced on the same production line and assembled in the same Class 100,000 clean room. This approach ensures a high quality level for our INDUSTRIAL products, as well as our MILITARY products.

Our INDUSTRIAL products are 100% static and dynamic tested, performed at +25°C. Our MILITARY products are 100% tested over their respective full temperature range for both static and dynamic parameters.

| OPERATION | INDUSTRIAL GRADE | MILITARY GRADE—/883 and NON-COMPLIANT "M" GRADE |
|---|--------------------|---|
| Clean room processing..... | YES..... | YES |
| Clean room testing..... | YES..... | YES |
| Solder Integrity tested..... | YES..... | YES |
| Wire bond integrity tested | YES..... | YES |
| All processing under document control | YES | YES |
| High power die inspection..... | NO | YES |
| Processed on military line..... | YES..... | YES |
| Certified operators | NO | YES |
| Maximum Number Of Rework Cycles Specified: | | |
| Solder | YES..... | YES |
| Epoxy..... | NO | YES |
| Wirebond..... | YES..... | YES |
| Pre-cap visual | SAMPLE..... | 100% |
| Pre-seal vacuum bake..... | YES..... | YES |
| Welded in controlled ATM. | YES..... | YES |
| Each unit checked for hermeticity | NO | YES |
| Temp. cycle: | | |
| -65°C to +150°C @ 10 cycles | NO..... | YES |
| Constant acceleration Cond. 5000G | NO | YES |
| Burn-in: 160 hrs. @ T _c = 125°C..... | NO | YES |
| Dynamic testing..... | +25°C..... | -55°C, +25°C, +125°C |
| External visual | YES..... | YES |
| Pin finish | Ni or solder | Solder |