

Rad hard MOSFET nomenclature

IR HL YS 7 9 7 0 3 4 C M - SCS A

Transistor type

- H Radiation hardened HEXFET
- HL Rad hard logic level MOSFET
- HS Rad hard synchronous rectifier
- HSL Rad hard synchronous rectifier (low inductance)

Package designator

All packages have metal lids unless otherwise noted

- Blank TO-204AA, AE (TO-3)
- C Chip / die (no package)
- W Wafer (no package)
- E LCC-18
- F TO-205AF (TO-39, low profile)
- G MO-036AB (14 lead ceramic DIP)
- I TO-259AA
- M TO-254AA
- MB TO-254AA tabless, low ohmic
- MK TO-254AA tabless, low ohmic, surface mount lead formed – at surface plane
- ML TO-254AA tabless, low ohmic, surface mount lead formed – below surface plane
- MS TO-254AA low ohmic
- N SMD-1
- NA SMD-2
- NJ SMD-0.5
- NJC SMD-0.5, ceramic lid
- NKC SMD-0.5e, enhanced, ceramic lid,
- NM SMD-0.2
- NMC SMD-0.2, ceramic lid
- NME SMD-0.2e, enhanced, ceramic lid
- NPC SMD-0.1, ceramic lid
- NS SupIR-SMD™
- PB Power Block, isolated
- Q LCC-28 (quad die)
- UB LCC 4-pads, shielded - tied to 4th pin
- UBC LCC 4-pads, ceramic lid, shielded
- UBCN LCC 3-pads, ceramic lid, isolated
- UBN LCC 3-pads, isolated
- UC LCC 6-pads
- V TO-258AA
- Y TO-257AA
- YA TO-257AA tabless
- YB TO-257AA tabless, low ohmic
- YJ TO-257AA tabless, surface mount lead formed
- YK TO-257AA tabless, low ohmic, surface mount lead formed
- YS TO-257AA low ohmic

Technology

- Blank R4 (HEXFET)
- 5 R5
- 5S R5, S-line
- 6 R6
- 6S R6, S-line
- 7 R7
- 7S R7, S-line
- 8 R8
- 9A R9

Channel

- Blank N-channel
- 6 Mixed N and P channel
- 9 P-channel

Lead option

- A Lead form down on TO-25x (if package is SMD, then lead attached)
- B Lead form up on TO-25x (if package is SMD-0.5, then lead attached and formed)
- C Lead trimmed (TO-25x packages only)
- D On DBC carrier, applies only to SMD-1 and SMD-2

Screening Level

- Blank no screening, COTS
- IRHiRel controlled drawing, die level
- CDV 100% die visual inspection
- CDH H level, MIL-PRF-19500, Appendix G
- CDK K level, MIL-PRF-19500, Appendix G
- IRHiRel qualified lot, packaged level
- SCX TX level screening for standard military application
- SCV TXV level screening (with 100% visual inspection) for standard military application
- SCS S level screening for space application

Process variation

- SE Single event effect tolerant (applicable only to R4 & R5)

Pinout

(applies only to TO-257AA packages)

- Blank Gate M Pin1 Drain
- Pin1 Drain Pin2 Source
- Pin2 Source Pin3 Gate

Package variation

- Blank glass eyelet (all TO-257AA packages)
- C ceramic eyelet (all TO-257AA packages)

Voltage adder

- 0 full spec rating (does not apply to 60 V devices)
- 3 30 V, e.g. 1x3 is 130 V
- 4 50 V, e.g. 2x4 is 250 V or, 0x4 is 60 V

Die size

- 1 die size 1
- 2 die size 1.7 & 2
- 3 die size 3
- 4 die size 4
- 5 die size 5
- 6 die size 6
- A die size 10
- Z smallest size

Voltage (BV_{DSS})

- 0 60 V
- 1 100 V (or 130 V or 150 V with voltage adder)
- 2 200 V (or 250 V with voltage adder)
- 3 400 V
- 4 500 V (or 550 V with voltage adder)
- C 600 V
- Y 20 V
- Z 30 V

Total dose hardness

- Blank 100 krad(Si) P-channel (R4 only)
- 3 300 krad(Si)
- 4 600 krad(Si)
- 5 500 krad(Si)
- 7 100 krad(Si)
- 8 1000 krad(Si)

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