## Rad hard MOSFET nomenclature

### Transistor type
- **H**: Radiation hardened MOSFET
- **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-259A
- **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
- **NS**: TO-254AA tabless, low ohmic
- **N**: SMD-1
- **NA**: SMD-2
- **NJ**: SMD-0.5
- **NJC**: SMD-0.2, ceramic lid
- **NKC**: SMD-0.2e, enhanced, ceramic lid
- **NM**: 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
- **SS**: 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
- **IR HiRel 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
- **IR HiRel 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
- **Blank**: SE: Single event effect tolerant
  - (applicable only to R4 & R5)

### Pinout
- **Blank**: (applies only to TO-257A packages)
  - **M**: Pin1 Gate Pin1 Drain
  - **Pin2**: Drain Pin2 Source
  - **Pin3**: Source Pin3 Gate

### Package variation
- **Blank**: glass eyelet (all TO-257A packages)
- **C**: ceramic eyelet (all TO-257A packages)

### Voltage adder
- **Blank**: full spec rating (does not apply to 60 V devices)
  - 30 V, e.g. 1x3 is 130 V
  - 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
- 7: die size 10
- Z: smallest size

### Voltage (BV_{DSS})
- **Blank**: 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)
- 5: 600 V
- 6: 20 V
- Z: 30 V

### Total dose hardness
- **Blank**: 100 krad(Si) P-channel (R4 only)
- 3: 300 krad(Si)
- 4: 500 krad(Si)
- 7: 100 krad(Si)
- 8: 1000 krad(Si)
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