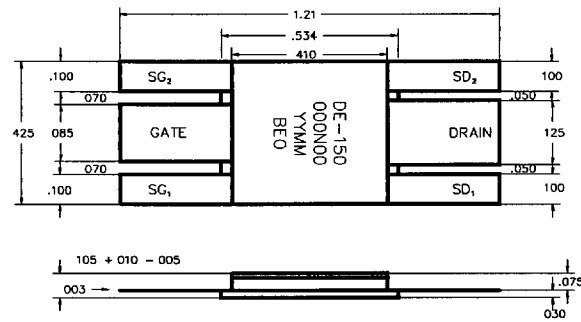


# DE-SERIES FAST POWER MOSFETS



## DE-150 SERIES

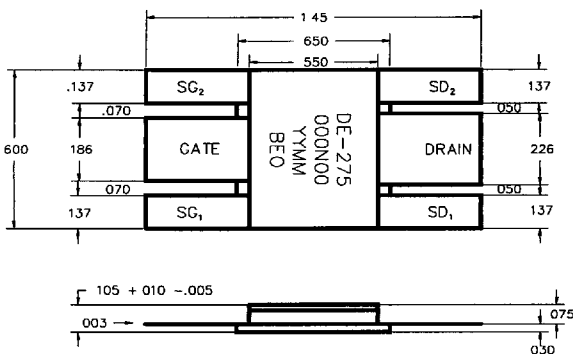


The DE-150 SERIES are the lowest power devices in the DE-SERIES family. However their speed and frequency are the highest. The upper operational frequency of the DE-150 SERIES is approximately 110MHz. The switching speed of the device family is on the order of 3-5ns 10%-90%, with peak currents greater than 70 amperes. Applications include:

- POWER RF AMPLIFIERS
- POWER RF GENERATORS
- LASER DIODE DRIVERS
- MICRO-CHANNEL PLATE GATING
- HIGH SPEED PULSE GENERATORS

| DE-150 | V <sub>DS</sub> (V) | I <sub>D</sub> (A) | I <sub>DM</sub> (A) | g <sub>fs</sub> (S) | R <sub>DS(ON)</sub> (Ω) | T <sub>R</sub> (ns) | C <sub>ISS</sub> (pF) | C <sub>OSS</sub> (pF) | C <sub>RSS</sub> (pF) | R <sub>θJHS</sub> | P <sub>D</sub> (W) |
|--------|---------------------|--------------------|---------------------|---------------------|-------------------------|---------------------|-----------------------|-----------------------|-----------------------|-------------------|--------------------|
| 501N04 | 500                 | 4.5                | 36                  | 4                   | 1.5                     | 5                   | 600                   | 50                    | 5                     | 1.25              | 80                 |
| 201N09 | 200                 | 9                  | 72                  | 5                   | .4                      | 5                   | 600                   | 105                   | 12                    | 1.25              | 80                 |
| 101N09 | 100                 | 9                  | 72                  | 8                   | .16                     | 5                   | 600                   | 160                   | 15                    | 1.25              | 80                 |

## DE-275 SERIES

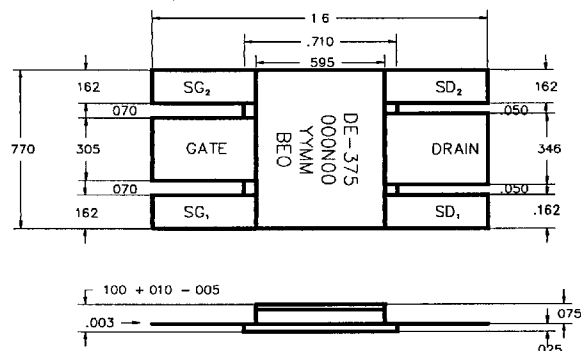


The DE-275 SERIES are the medium power devices in the DE-SERIES family. Their speed and frequency cover the communication and ISM bands. The upper operational frequency of the DE-275 SERIES is approximately 50MHz. The switching speed of the device family is on the order of 4-5ns 10%-90%, with peak currents greater than 200 amperes. Applications include:

- >1000W RF AMPLIFIERS
- >1000W RF GENERATORS
- HIGH CURRENT LASER DIODE DRIVERS
- HIGH VOLTAGE MICRO-CHANNEL PLATE GATING
- HIGH VOLTAGE HIGH POWER PULSE GENERATION

| DE-275 | V <sub>DS</sub> (V) | I <sub>D</sub> (A) | I <sub>DM</sub> (A) | g <sub>fs</sub> (S) | R <sub>DS(ON)</sub> (Ω) | T <sub>R</sub> (ns) | C <sub>ISS</sub> (pF) | C <sub>OSS</sub> (pF) | C <sub>RSS</sub> (pF) | R <sub>θJHS</sub> | P <sub>D</sub> (W) |
|--------|---------------------|--------------------|---------------------|---------------------|-------------------------|---------------------|-----------------------|-----------------------|-----------------------|-------------------|--------------------|
| 102N05 | 1000                | 5                  | 40                  | 6                   | 2.6                     | 5                   | 2500                  | 75                    | 15                    | .45               | 270                |
| 501N16 | 500                 | 16                 | 125                 | 9                   | .5                      | 5                   | 2500                  | 125                   | 25                    | .45               | 270                |
| 201N25 | 200                 | 25                 | 200                 | 18                  | .08                     | 5                   | 2500                  | 250                   | 50                    | .45               | 270                |
| 101N30 | 100                 | 30                 | 240                 | 20                  | .05                     | 5                   | 2500                  | 500                   | 100                   | .45               | 270                |

## DE-375 SERIES



The DE-375 SERIES are the highest power devices in the DE-SERIES family. Their speed and frequency cover the communication and ISM bands. The upper operational frequency of the DE-375 SERIES is approximately 30MHz. The switching speed of the device family is on the order of 6-8ns 10%-90%, with peak currents of almost 300 amperes. Applications include:

- 1KW to 5KW RF AMPLIFIERS
- 1KW to 5KW RF GENERATORS
- 100A to 500A LASER DIODE DRIVERS
- HIGH VOLTAGE HIGH POWER PULSE GENERATION
- HIGH POWER ULTRA-SONIC TRANSDUCER DRIVERS

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Preliminary specifications subject to change without notice.

| DE-375 | V <sub>DS</sub> (V) | I <sub>D</sub> (A) | I <sub>DM</sub> (A) | g <sub>fs</sub> (S) | R <sub>DS(ON)</sub> (Ω) | T <sub>R</sub> (ns) | C <sub>ISS</sub> (pF) | C <sub>OSS</sub> (pF) | C <sub>RSS</sub> (pF) | R <sub>θJHS</sub> | P <sub>D</sub> (W) |
|--------|---------------------|--------------------|---------------------|---------------------|-------------------------|---------------------|-----------------------|-----------------------|-----------------------|-------------------|--------------------|
| 102N10 | 1000                | 10                 | 80                  | 12                  | 1.2                     | 8                   | 3800                  | 100                   | 25                    | .35               | 340                |
| 501N21 | 500                 | 21                 | 125                 | 21                  | .25                     | 8                   | 3800                  | 160                   | 60                    | .35               | 340                |
| 301N35 | 300                 | 35                 | 280                 | 29                  | .10                     | 8                   | 3800                  | 300                   | 90                    | .35               | 340                |

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