

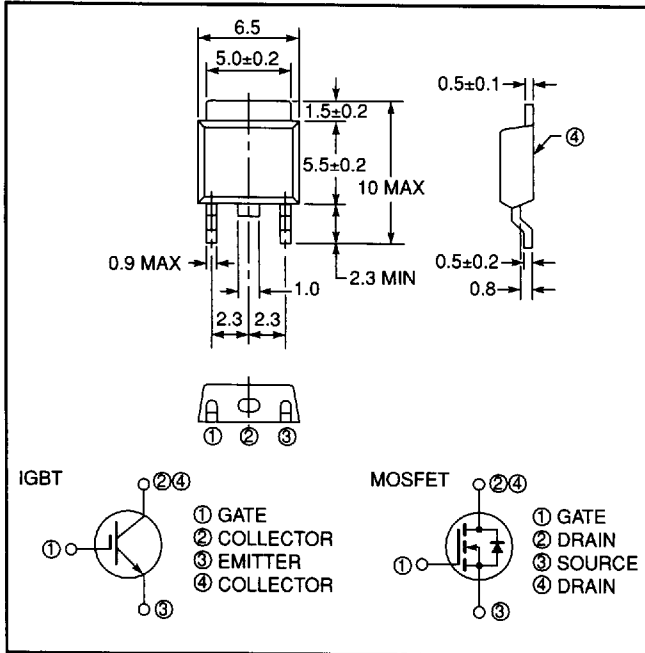


Discrete MOSFET - Low Voltage Trench Gate (continued)
4.0V Driver Voltage p-channel MOSFETs

| Device Number | Maximum Ratings, T _c = 25°C | | | Electrical Characteristics | | | | | |
|---------------|--|--------------------|----------------------|----------------------------|------|-------------------------|-----------------------|----------|------|
| | V _{DSS} (V) | I _D (A) | V _{GSS} (V) | r _{DS(on)} (mΩ) | | V _{GS(th)} (V) | C _{ISS} (pF) | Package | |
| | | | | Typ. | Max. | | | Outline | Page |
| FX3ASJ-2 | -100 | -3 | ±15 | 1000 | 1300 | -1.5 | 480 | MP-3 | 31 |
| FX3KMJ-2 | -100 | -3 | ±15 | 1000 | 1300 | -1.5 | 480 | TO-220FN | 31 |
| FX3UMJ-2 | -100 | -3 | ±15 | 1000 | 1300 | -1.5 | 480 | TO-220 | 31 |
| FX3VSJ-2 | -100 | -3 | ±15 | 1000 | 1300 | -1.5 | 480 | TO-220S | 31 |
| FX6ASJ-2 | -100 | -6 | ±15 | 460 | 580 | -1.5 | 1110 | MP-3 | 31 |
| FX6KMJ-2 | -100 | -6 | ±15 | 460 | 580 | -1.5 | 1110 | TO-220FN | 31 |
| FX6UMJ-2 | -100 | -6 | ±15 | 460 | 580 | -1.5 | 1110 | TO-220 | 31 |
| FX6VSJ-2 | -100 | -6 | ±15 | 460 | 580 | -1.5 | 1110 | TO-220S | 31 |
| FX6SMJ-2 | -100 | -6 | ±15 | 460 | 580 | -1.5 | 1110 | TO-3P | 32 |
| FX20ASJ-2 | -100 | -20 | ±15 | 200 | 260 | -1.5 | 2360 | MP-3 | 31 |
| FX20KMJ-2 | -100 | -20 | ±15 | 200 | 260 | -1.5 | 2360 | TO-220FN | 31 |
| FX20UMJ-2 | -100 | -20 | ±15 | 200 | 260 | -1.5 | 2360 | TO-220 | 31 |
| FX20VSJ-2 | -100 | -20 | ±15 | 200 | 260 | -1.5 | 2360 | TO-220S | 31 |
| FX20SMJ-2 | -100 | -20 | ±15 | 200 | 260 | -1.5 | 2360 | TO-3P | 32 |
| FX30KMJ-2 | -100 | -30 | ±15 | 113 | 143 | -1.5 | 4450 | TO-220FN | 31 |
| FX30UMJ-2 | -100 | -30 | ±15 | 113 | 143 | -1.5 | 4450 | TO-220 | 31 |
| FX30VSJ-2 | -100 | -30 | ±15 | 113 | 143 | -1.5 | 4450 | TO-220S | 31 |
| FX30SMJ-2 | -100 | -30 | ±15 | 113 | 143 | -1.5 | 4450 | TO-3P | 32 |
| FX50KMJ-2 | -100 | -50 | ±15 | 39 | 50 | -1.5 | 11130 | TO-220FN | 31 |
| FX50UMJ-2 | -100 | -50 | ±15 | 39 | 50 | -1.5 | 11130 | TO-220 | 31 |
| FX50VSJ-2 | -100 | -50 | ±15 | 39 | 50 | -1.5 | 11130 | TO-220S | 31 |
| FX50SMJ-2 | -100 | -50 | ±15 | 39 | 50 | -1.5 | 11130 | TO-3P | 32 |
| FX1ASJ-3 | -150 | -1 | ±15 | 2000 | 2600 | -1.5 | 480 | MP-3 | 31 |
| FX1KMJ-3 | -150 | -1 | ±15 | 2000 | 2600 | -1.5 | 480 | TO-220FN | 31 |
| FX1UMJ-3 | -150 | -1 | ±15 | 2000 | 2600 | -1.5 | 480 | TO-220 | 31 |
| FX1VSJ-3 | -150 | -1 | ±15 | 2000 | 2600 | -1.5 | 480 | TO-220S | 31 |
| FX3ASJ-3 | -150 | -3 | ±15 | 930 | 1200 | -1.5 | 1170 | MP-3 | 31 |
| FX3KMJ-3 | -150 | -3 | ±15 | 930 | 1200 | -1.5 | 1170 | TO-220FN | 31 |
| FX3UMJ-3 | -150 | -3 | ±15 | 930 | 1200 | -1.5 | 1170 | TO-220 | 31 |
| FX3VSJ-3 | -150 | -3 | ±15 | 930 | 1200 | -1.5 | 1170 | TO-220S | 31 |
| FX3SMJ-3 | -150 | -3 | ±15 | 930 | 1200 | -1.5 | 1170 | TO-3P | 32 |
| FX6ASJ-3 | -150 | -6 | ±15 | 410 | 530 | -1.5 | 2420 | MP-3 | 31 |
| FX6KMJ-3 | -150 | -6 | ±15 | 410 | 530 | -1.5 | 2420 | TO-220FN | 31 |
| FX6UMJ-3 | -150 | -6 | ±15 | 410 | 530 | -1.5 | 2420 | TO-220 | 31 |
| FX6VSJ-3 | -150 | -6 | ±15 | 410 | 530 | -1.5 | 2420 | TO-220S | 31 |
| FX6SMJ-3 | -150 | -6 | ±15 | 410 | 530 | -1.5 | 2420 | TO-3P | 32 |
| FX20KMJ-3 | -150 | -20 | ±15 | 230 | 290 | -1.5 | 4470 | TO-220FN | 31 |
| FX20UMJ-3 | -150 | -20 | ±15 | 230 | 290 | -1.5 | 4470 | TO-220 | 31 |
| FX20VSJ-3 | -150 | -20 | ±15 | 230 | 290 | -1.5 | 4470 | TO-220S | 31 |
| FX20SMJ-3 | -150 | -20 | ±15 | 230 | 290 | -1.5 | 4470 | TO-3P | 32 |
| FX30KMJ-3 | -150 | -30 | ±15 | 78 | 100 | -1.5 | 11430 | TO-220FN | 31 |
| FX30UMJ-3 | -150 | -30 | ±15 | 78 | 100 | -1.5 | 11430 | TO-220 | 31 |
| FX30VSJ-3 | -150 | -30 | ±15 | 78 | 100 | -1.5 | 11430 | TO-220S | 31 |
| FX30SMJ-3 | -150 | -30 | ±15 | 78 | 100 | -1.5 | 11430 | TO-3P | 32 |

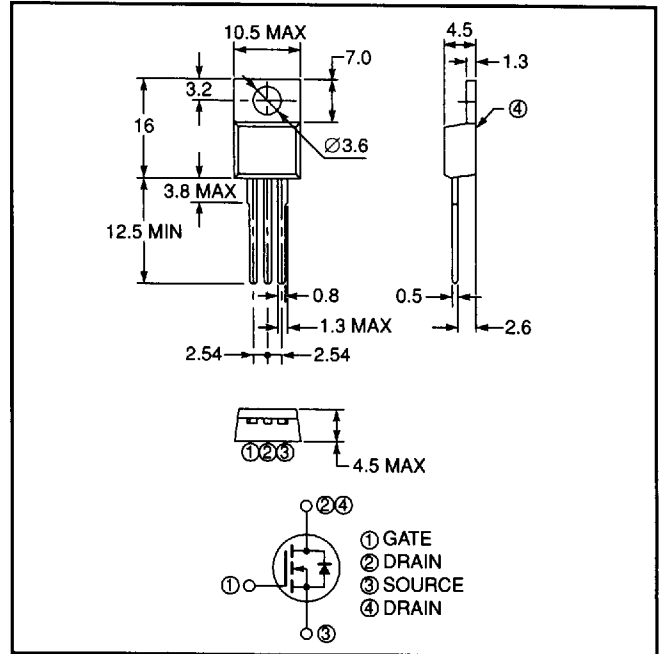
r_{DS(on)} (mΩ) - shows maximum value of on-resistance at V_{GS} = 10V

MP-3



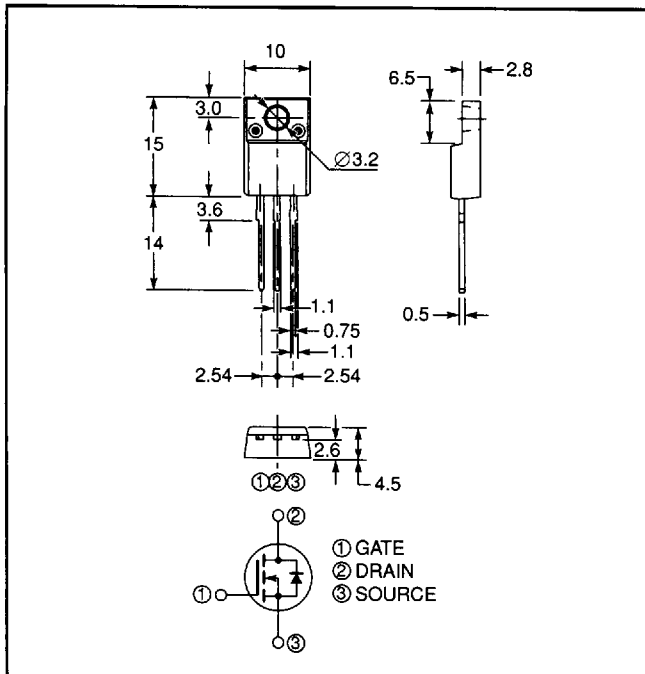
IGBT CT**AS-8
 MOSFET FS**AS-8

TO-220



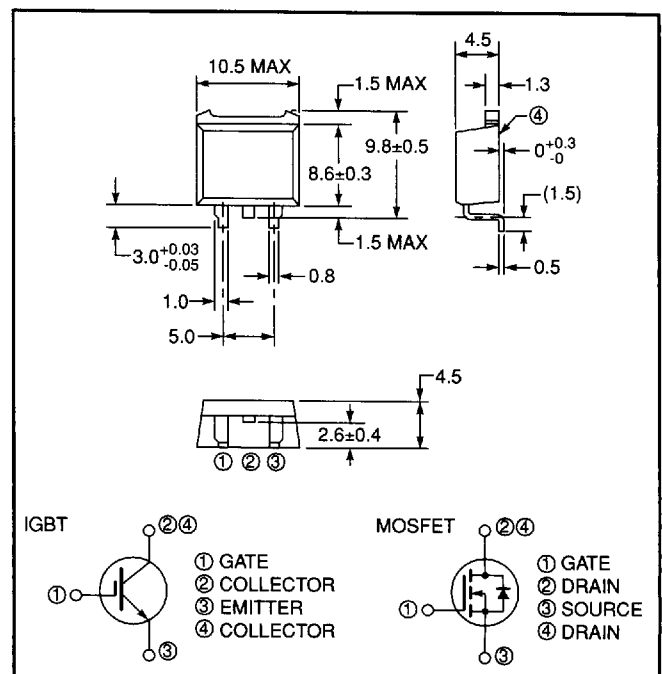
MOSFET FK**UM-**, FS**UM-**

TO-220FN



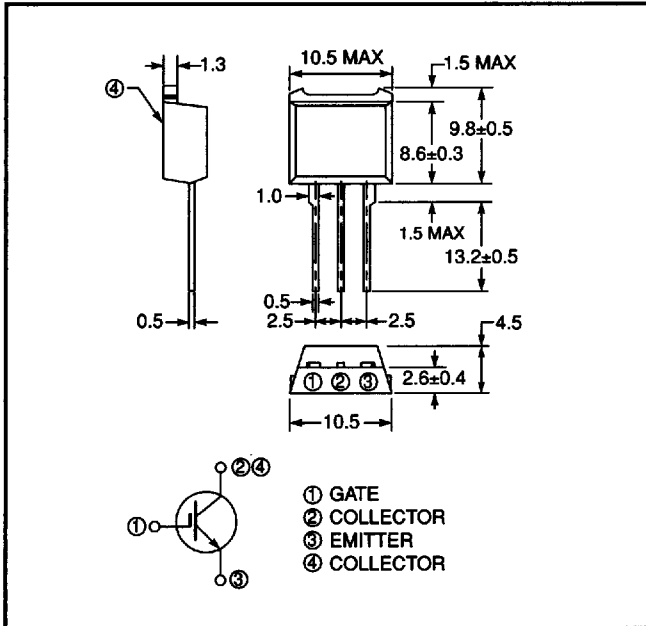
MOSFET FK**KM-**, FS**KM-**

TO-220S



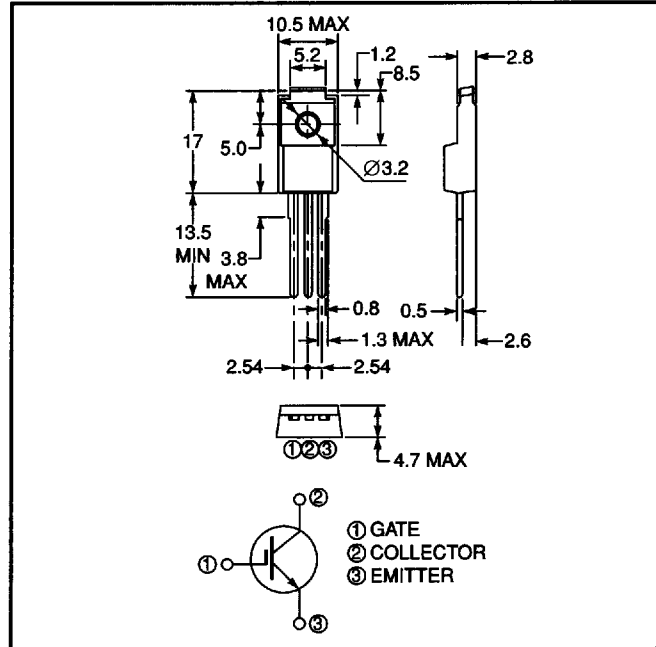
IGBT CT**VS-8
 MOSFET FK**VS-**, FS**VS-**

TO-220C



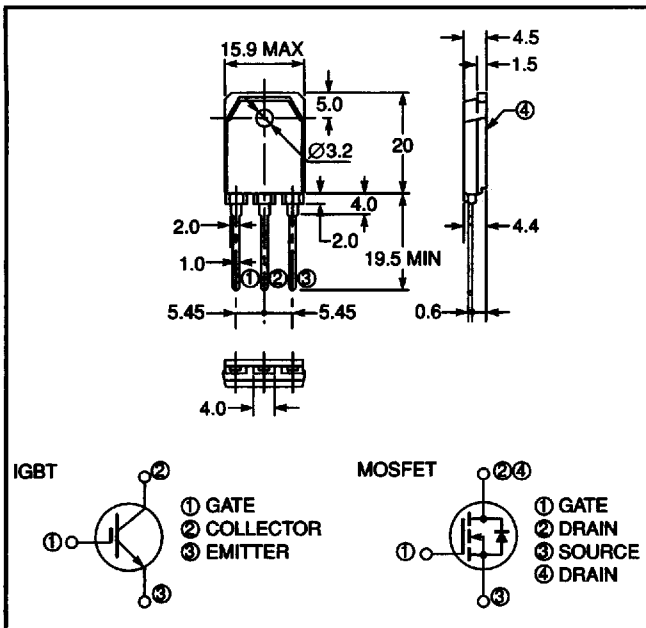
IGBT CT**VM-8

TO-220F



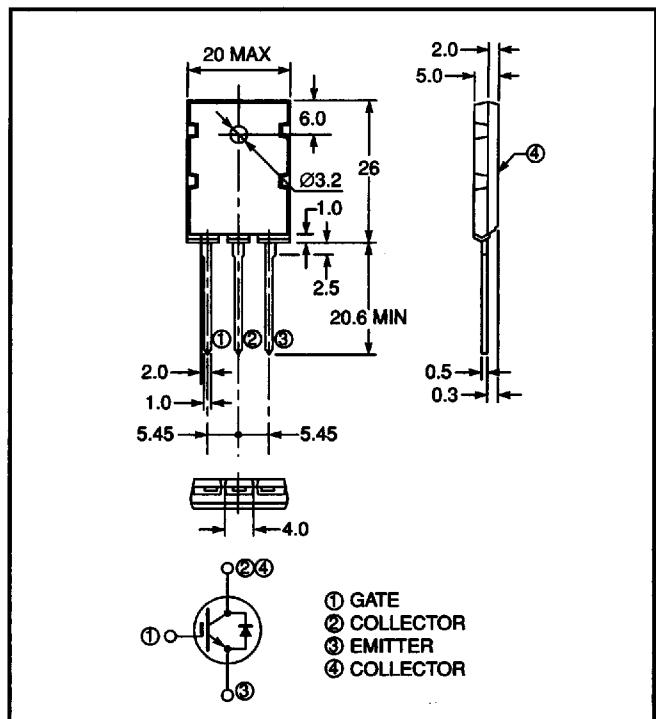
IGBT CT**TM-**

TO-3P



IGBT CT**SM-8
 MOSFET FK**SM-**, FS**SM-**

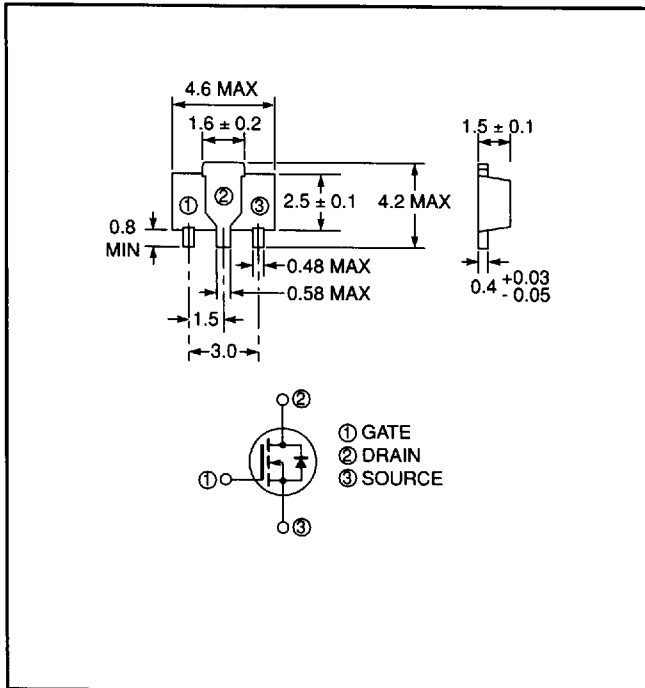
TO-3PL



IGBT CT**AM-**

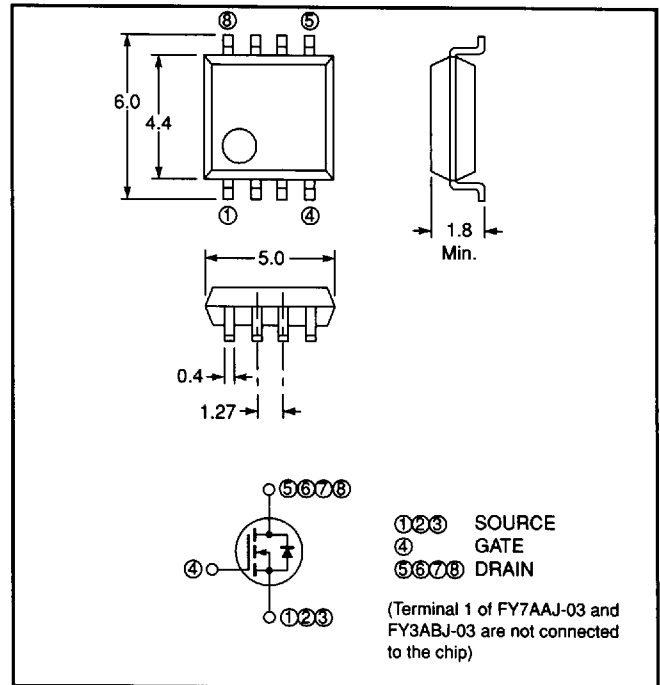
Device Outline Drawings

SOT-89



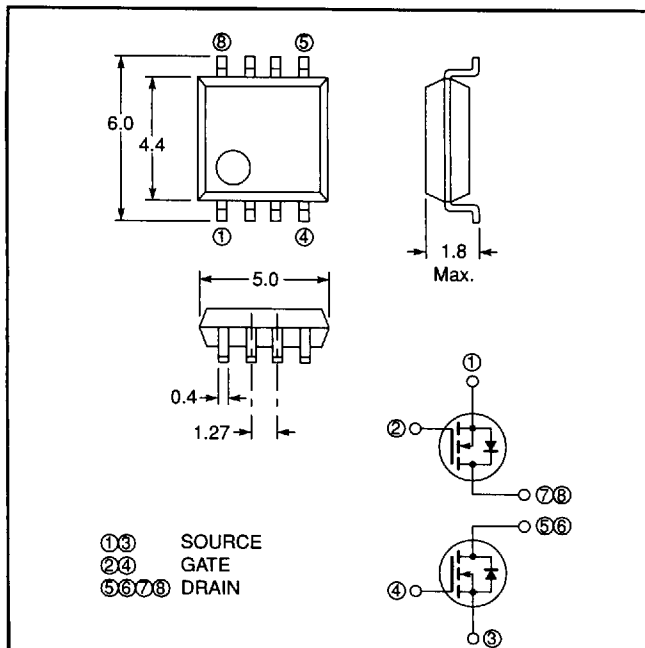
MOSFET FS**, FX**

SOP-8 (Single)



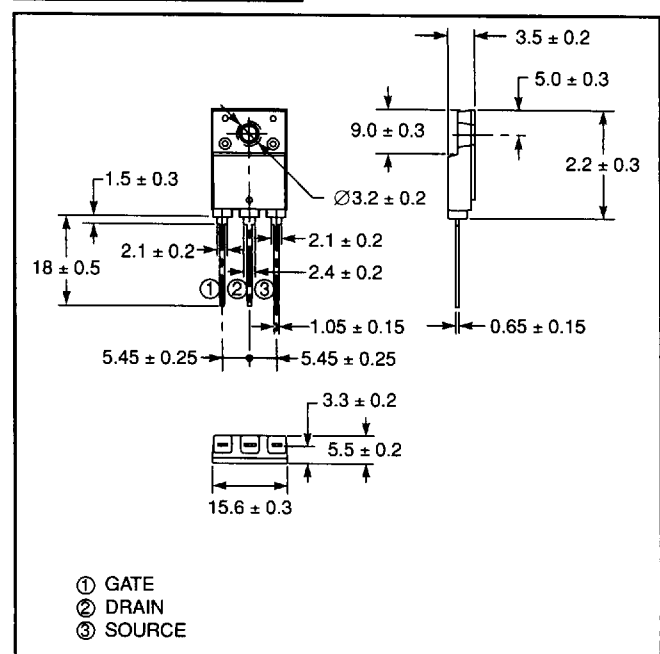
MOSFET FY**

SOP-8 (Dual)



MOSFET FY**

TO-3PF



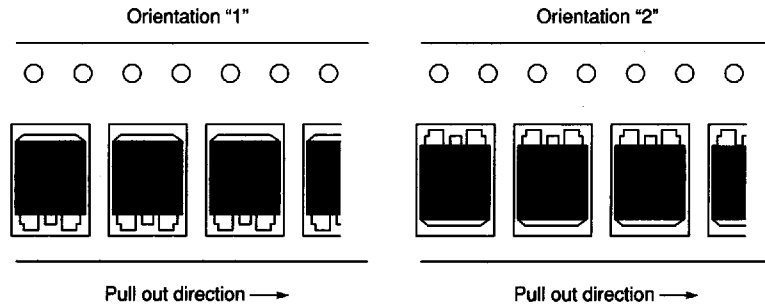
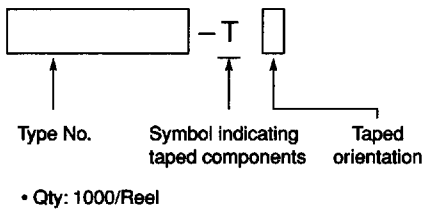
MOSFET FS**RM-**

MOSFET Packing Quantities and Types

| Package | Outline Code | Packing | Minimum Quantity per Package |
|----------|--------------|---------|------------------------------|
| TO-220 | UM | Bag | 100 |
| TO-220FN | KM | Tube | 50 |
| TO-220S | VS | Bag | 100 |
| TO-220S | VS | Reel | 1000 |
| TO-3P | SM | Bag | 20 |
| MP-3 | AS | Bag | 500 |
| MP-3 | AS | Reel | 3000 |
| SOP-8 | FY | Reel | 3000 |

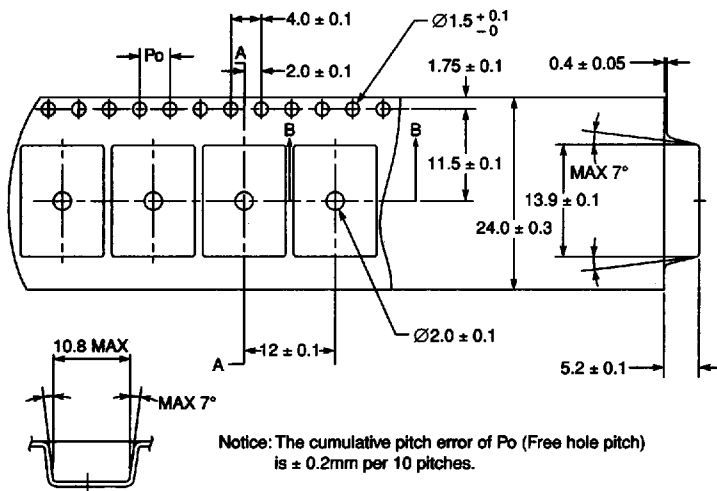
TO-220S Taping

(a) Marking

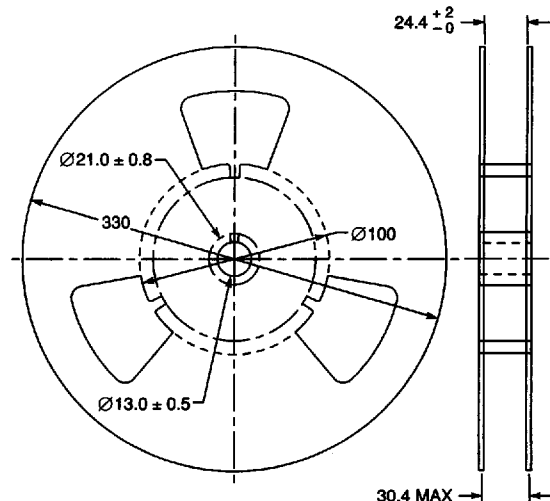


(b) Taping

• Tape Shape and Dimensions

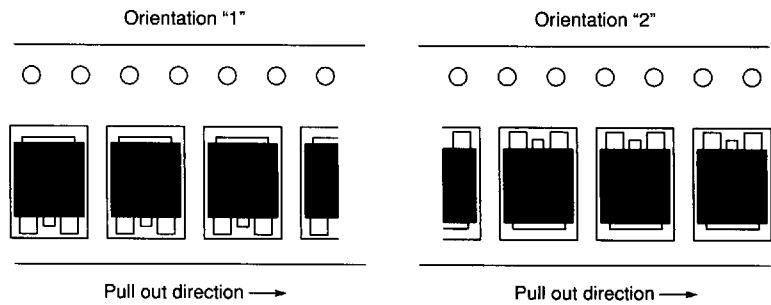
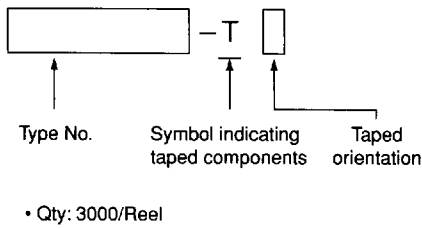


• Reel Shape and Dimensions



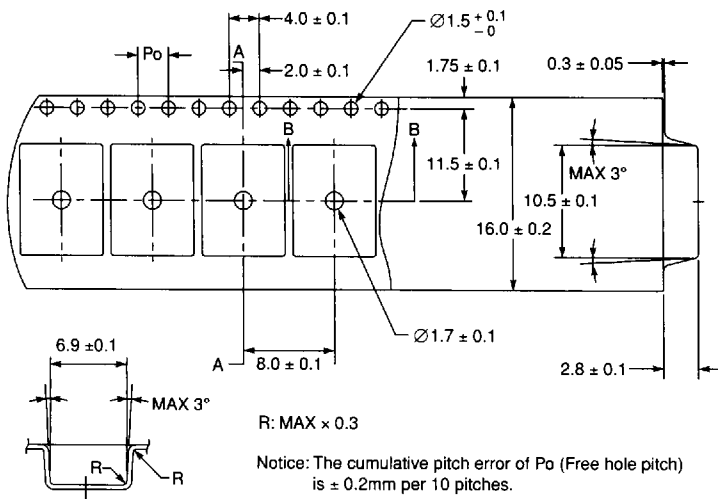
MP-3 Taping

(a) Marking

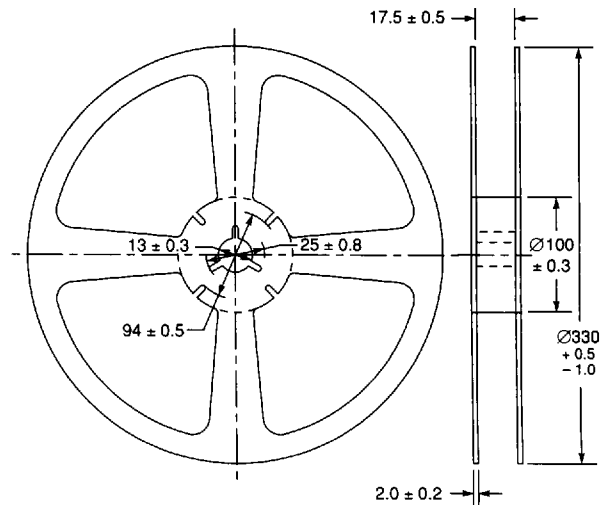


(b) Taping

• Tape Shape and Dimensions

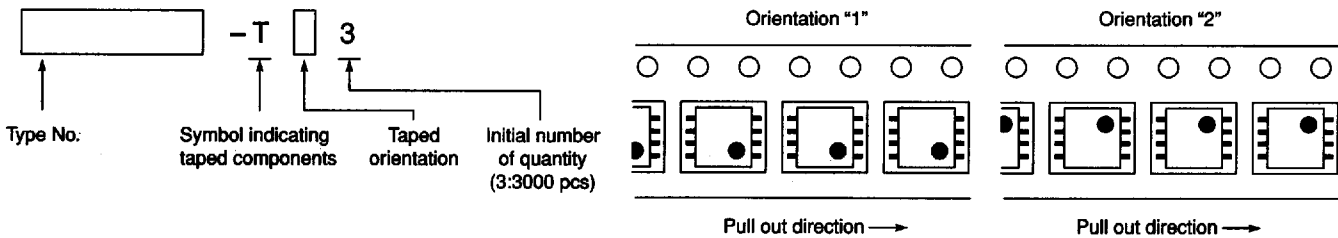


• Reel Shape and Dimensions



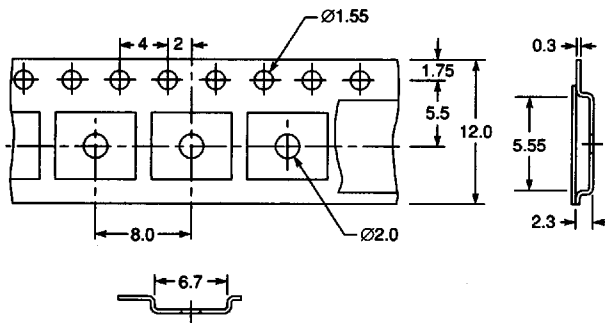
SOP-8 Taping

(a) Marking

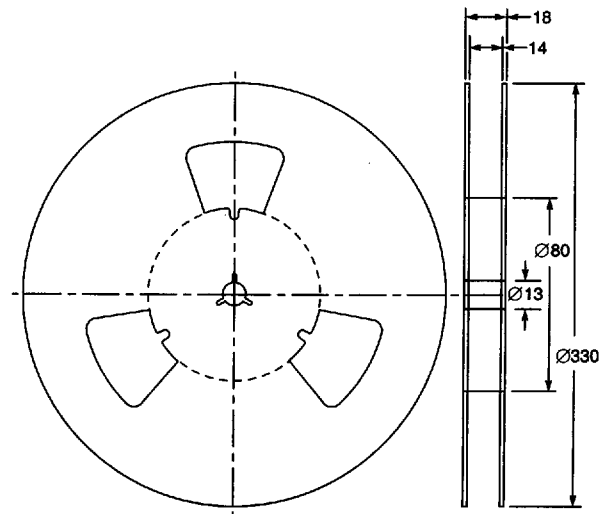


(b) Taping

- Tape Shape and Dimensions

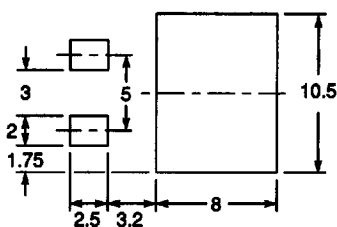


- Reel Shape and Dimensions

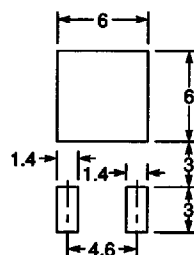


Recommended Mounting Pad

TO-220S Package



MP-3 Package



SOP-8 Package

