



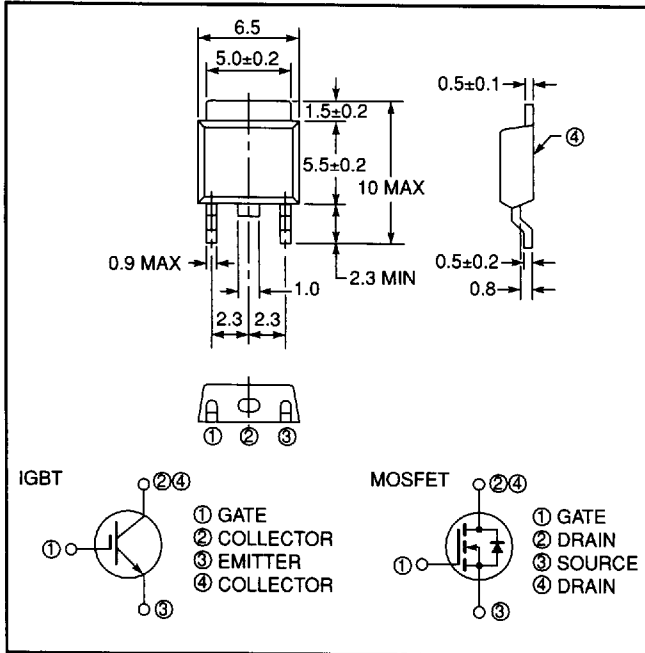
**Discrete MOSFET - Low Voltage Trench Gate (continued)**  
**4.0V Driver Voltage p-channel MOSFETs**

Device Number	Maximum Ratings, T <sub>c</sub> = 25°C			Electrical Characteristics					
	V <sub>DSS</sub> (V)	I <sub>D</sub> (A)	V <sub>GSS</sub> (V)	r <sub>DS(on)</sub> (mΩ)		V <sub>GS(th)</sub> (V)	C <sub>ISS</sub> (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<sub>DS(on)</sub> (mΩ) - shows maximum value of on-resistance at V<sub>GS</sub> = 10V

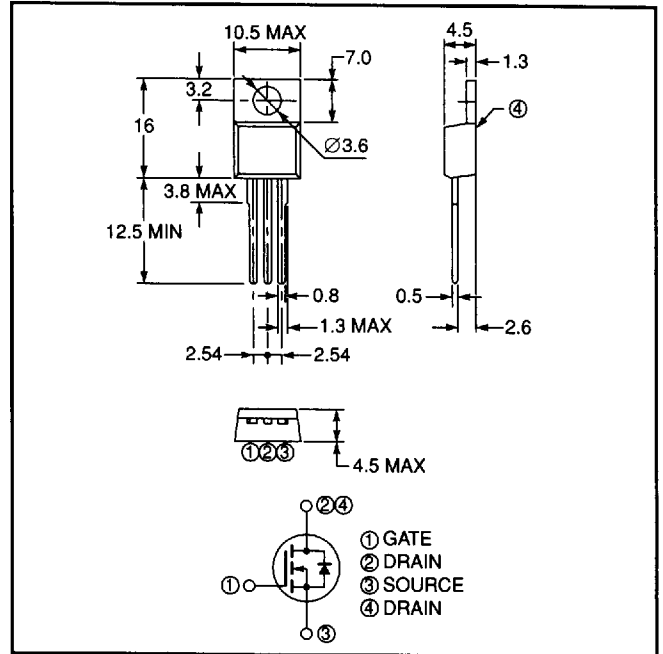
## Device Outline Drawings

### MP-3



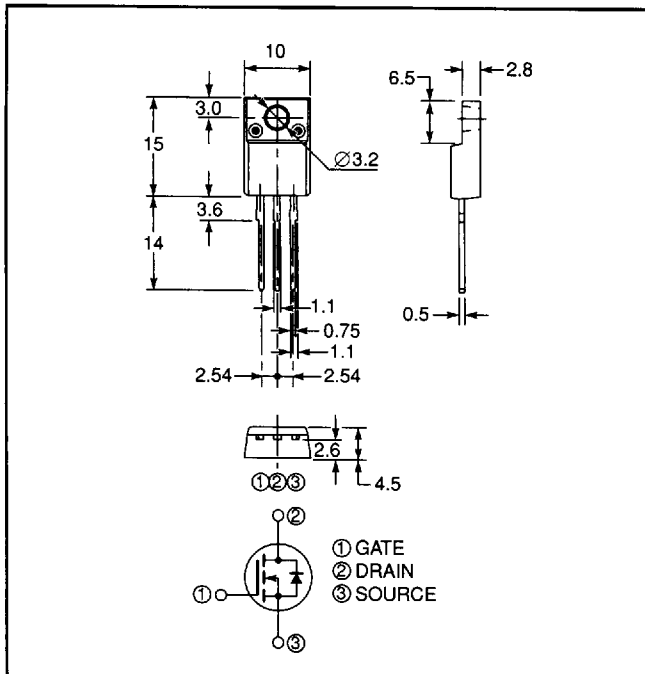
IGBT CT\*\*AS-8  
 MOSFET FS\*\*AS-8

### TO-220



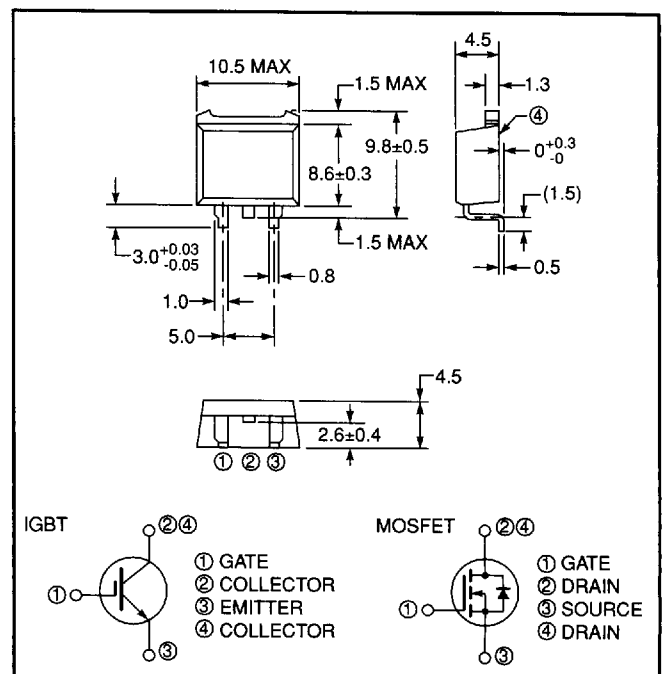
MOSFET FK\*\*UM-\*\*, FS\*\*UM-\*\*

### TO-220FN



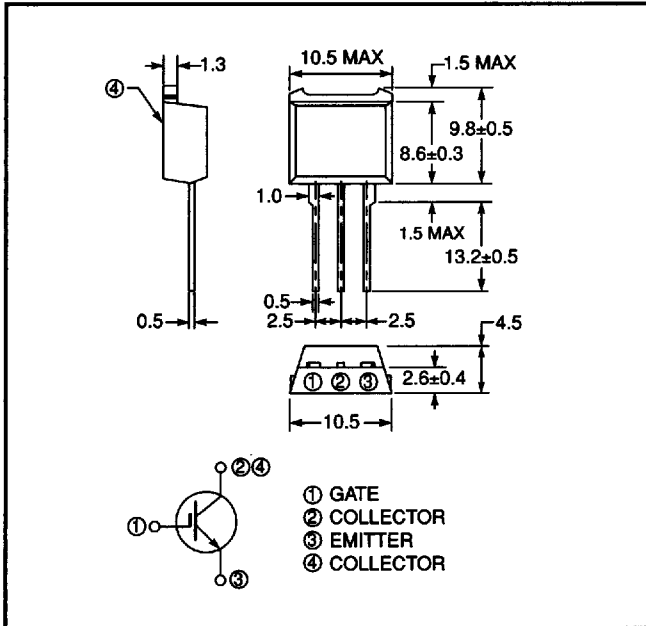
MOSFET FK\*\*KM-\*\*, FS\*\*KM-\*\*

### TO-220S



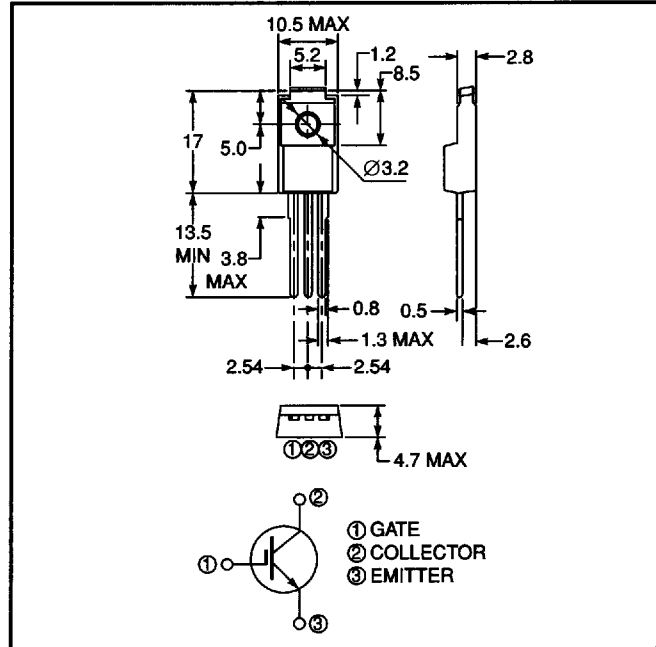
IGBT CT\*\*VS-8  
 MOSFET FK\*\*VS-\*\*, FS\*\*VS-\*\*

### TO-220C



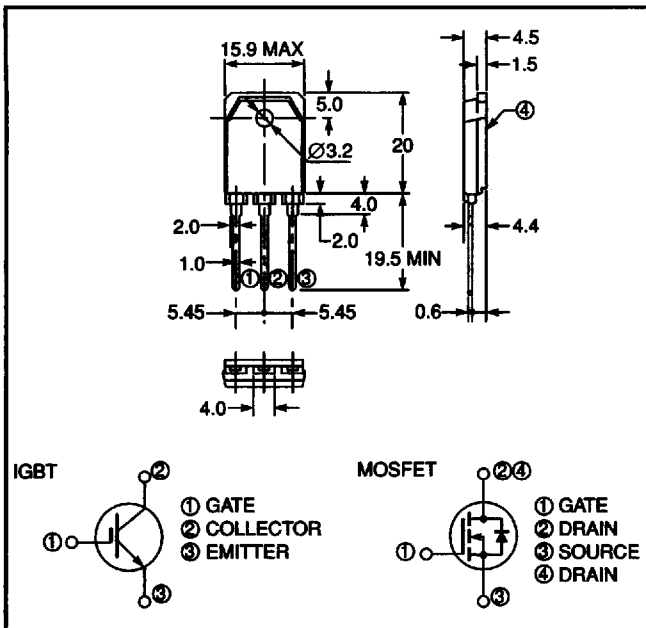
IGBT CT\*\*VM-8

### TO-220F



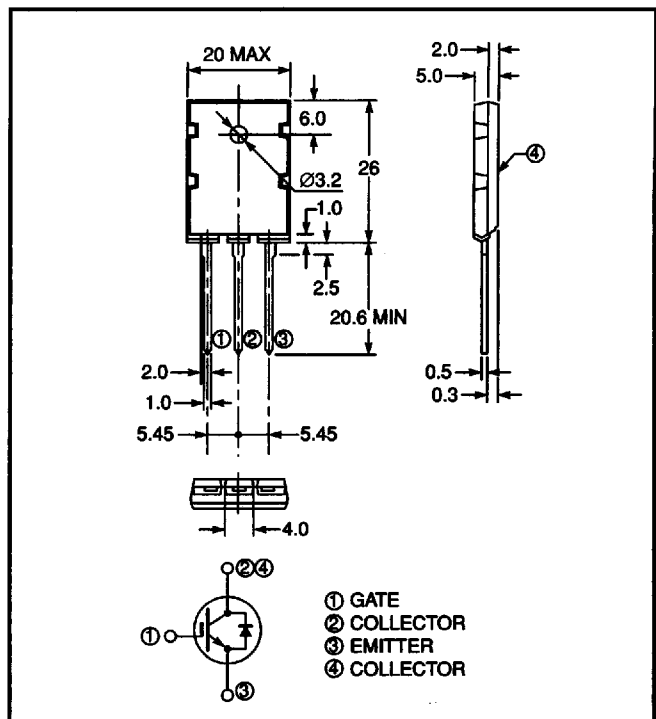
IGBT CT\*\*TM-\*\*

### TO-3P



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

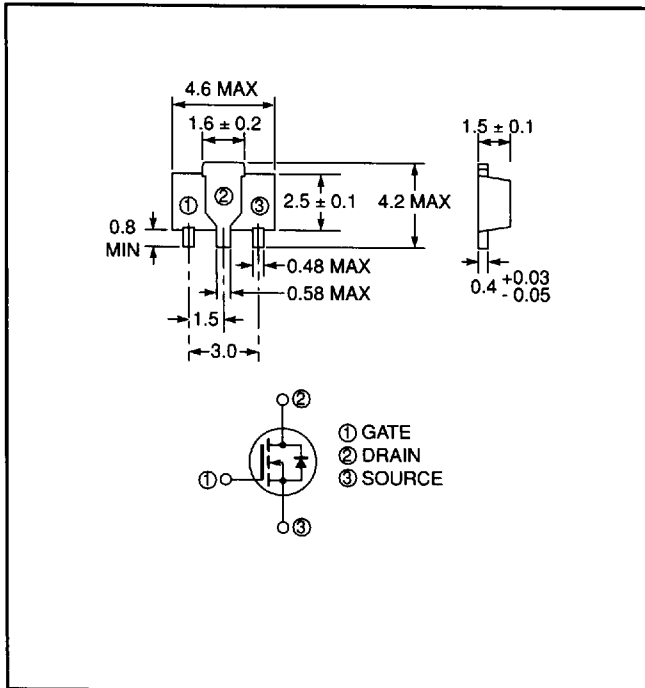
### TO-3PL



IGBT CT\*\*AM-\*\*

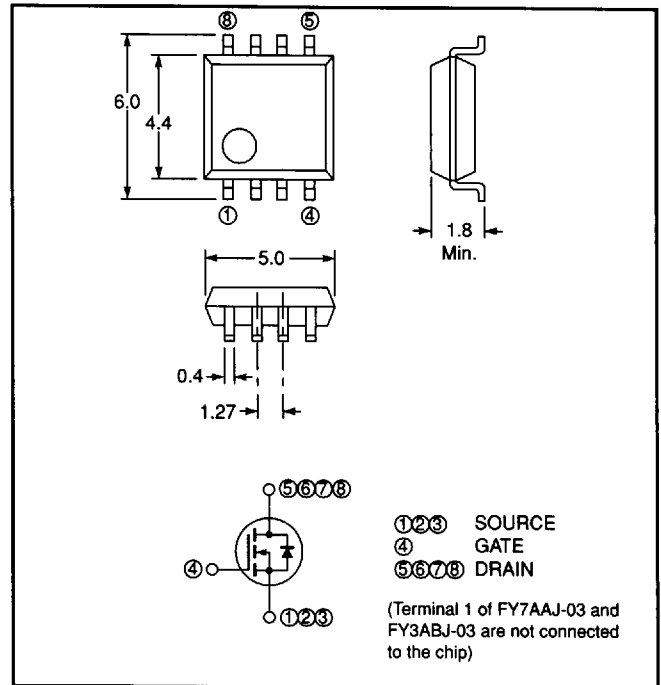
## Device Outline Drawings

### SOT-89



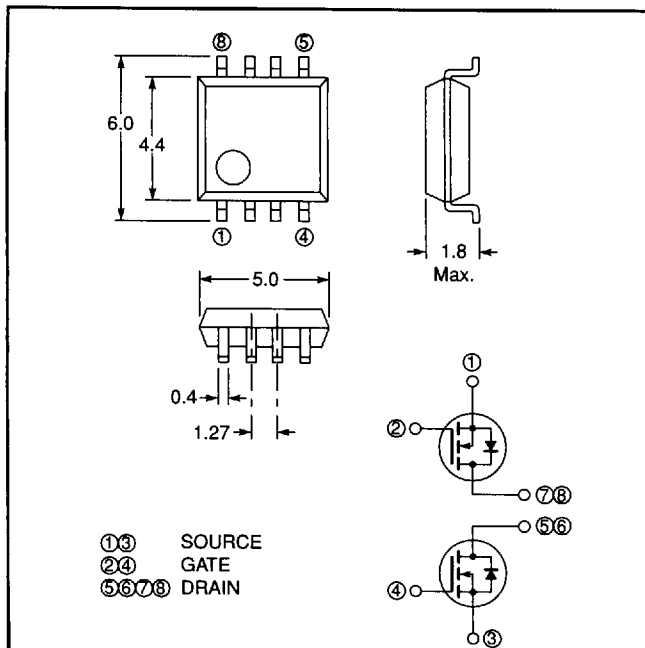
MOSFET FS\*\*, FX\*\*

### SOP-8 (Single)



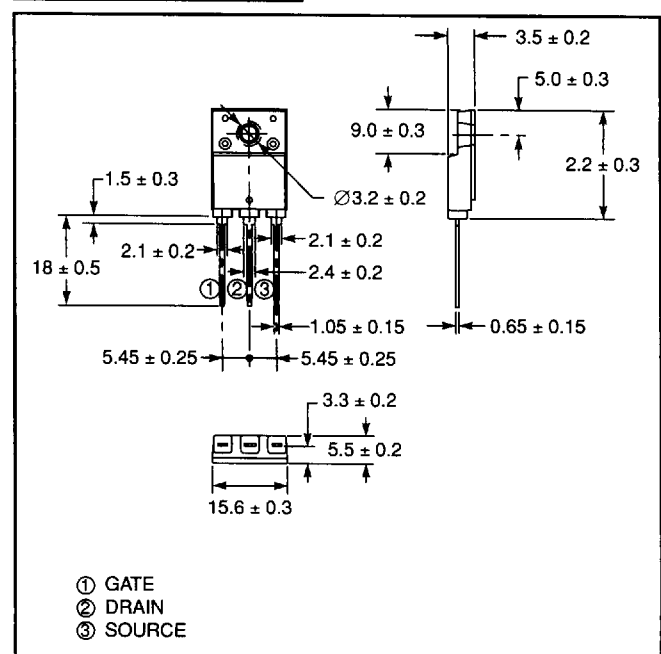
MOSFET FY\*\*

### SOP-8 (Dual)



MOSFET FY\*\*

### TO-3PF



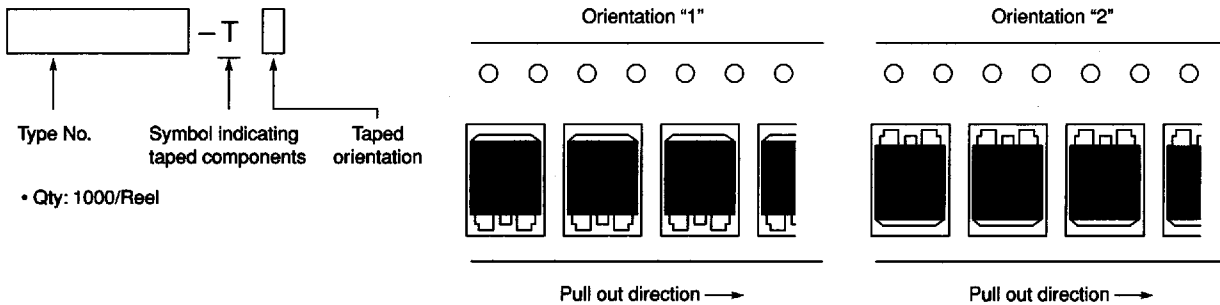
MOSFET FS\*\*RM-\*\*

### 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

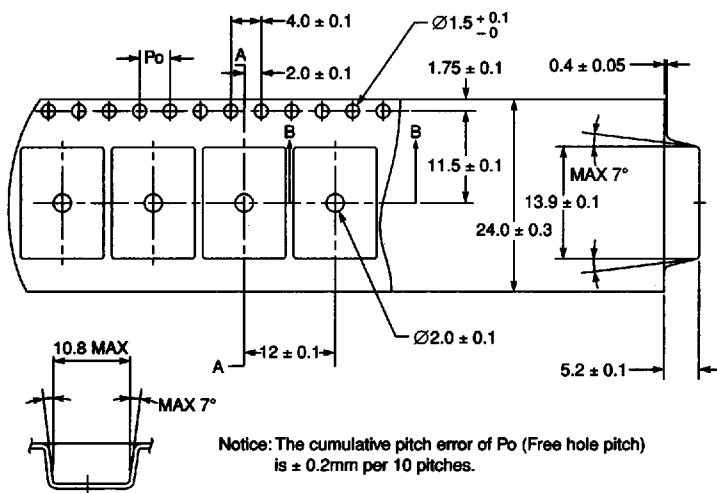
### TO-220S Taping

#### (a) Marking

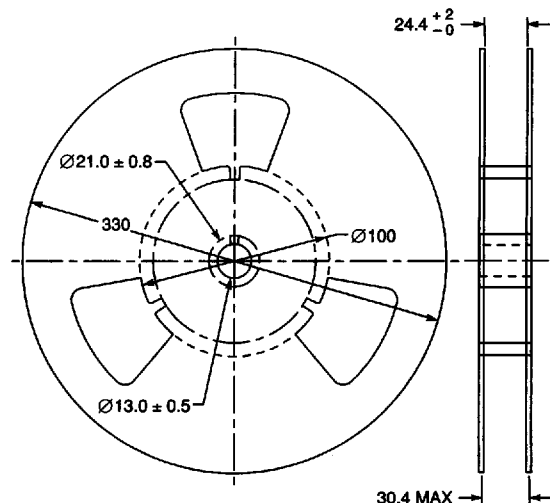


#### (b) Taping

##### • Tape Shape and Dimensions

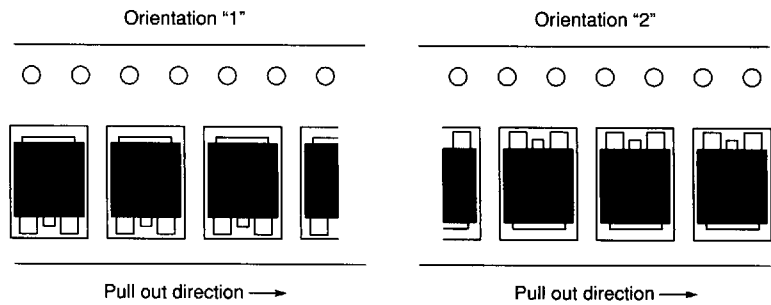
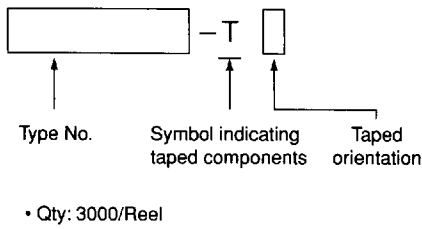


##### • Reel Shape and Dimensions



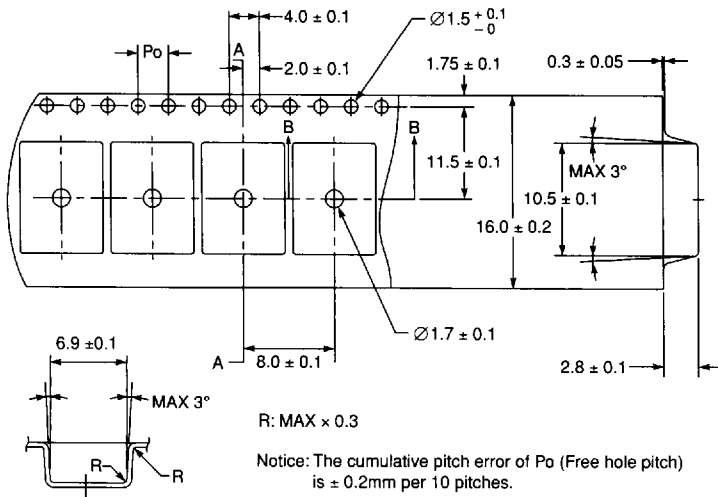
### MP-3 Taping

#### (a) Marking

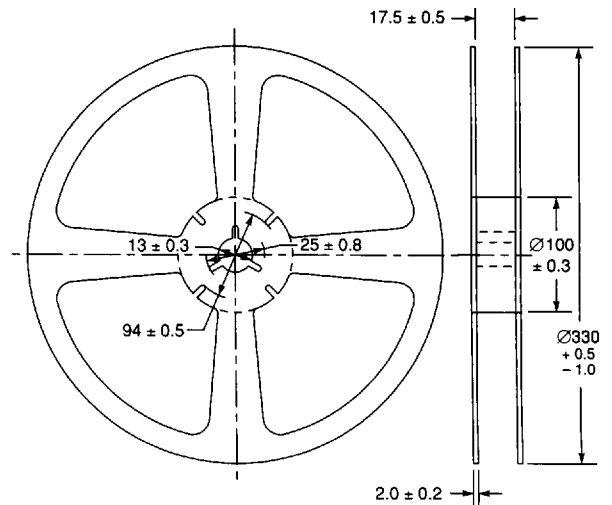


#### (b) Taping

##### • Tape Shape and Dimensions

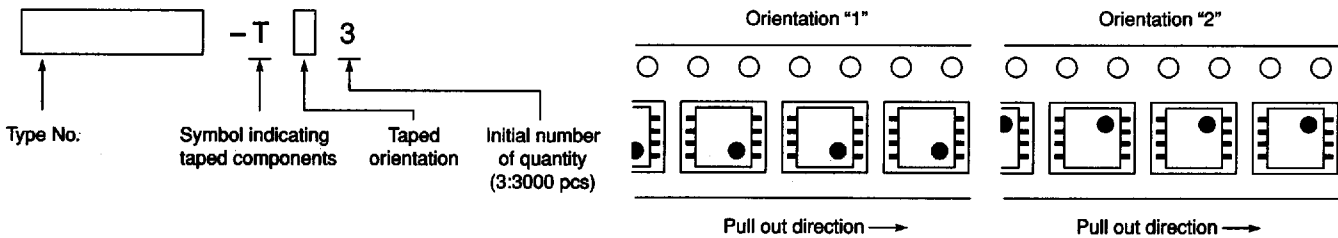


##### • Reel Shape and Dimensions



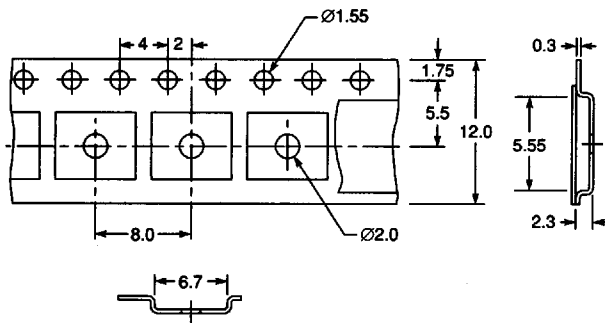
### SOP-8 Taping

#### (a) Marking

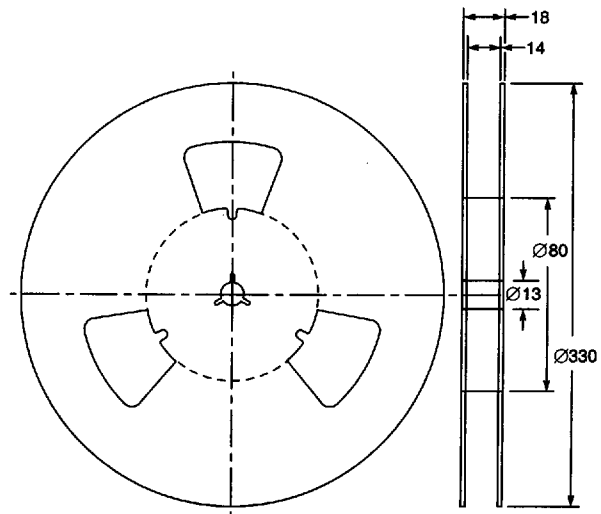


#### (b) Taping

- Tape Shape and Dimensions

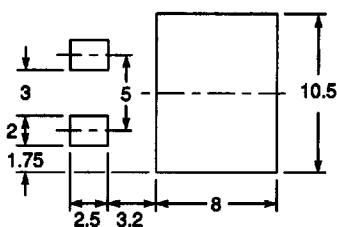


- Reel Shape and Dimensions

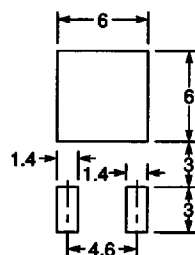


### Recommended Mounting Pad

#### TO-220S Package



#### MP-3 Package



#### SOP-8 Package

