

### Discrete MOSFET - Low Voltage Trench Gate (continued)

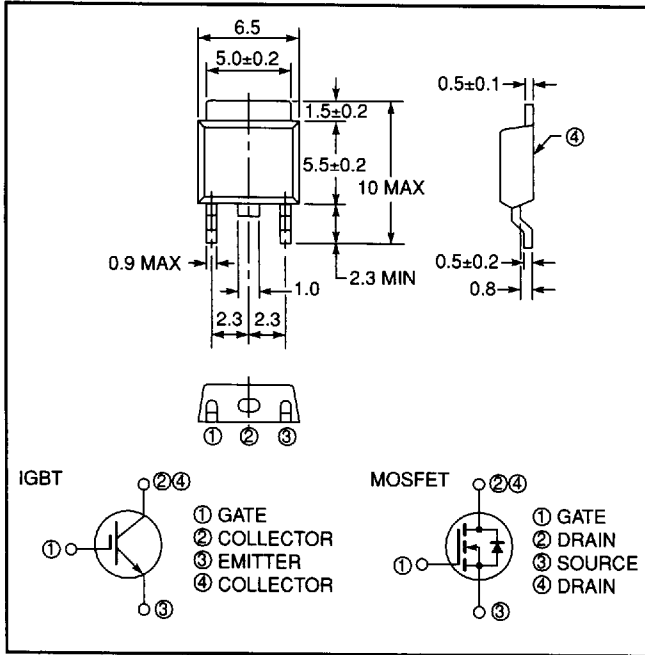
#### 2.5V Driver Voltage n-channel MOSFETs

Device Number	Maximum Ratings, T <sub>c</sub> = 25°C				Electrical Characteristics				Package	
	V <sub>DSS</sub> (V)	I <sub>D</sub> (A)	P <sub>D</sub> (W)	V <sub>GSS</sub> (V)	r <sub>DS(on)</sub> (mΩ)		V <sub>GS(th)</sub> (V)	C <sub>ISS</sub> (pF)	Outline	Page
					Typ.	Max.				
FS5ASH-2	100	5	20	±10	315	440	0.8	540	MP-3	31
FS5UMH-2	100	5	20	±10	315	440	0.8	540	TO-220	31
FS5VSH-2	100	5	20	±10	315	440	0.8	540	TO-220S	31
FS5KMH-2	100	5	15	±10	315	440	0.8	540	TO-220FN	31
FS10ASH-2	100	10	30	±10	158	210	0.8	1150	MP-3	31
FS10UMH-2	100	10	30	±10	158	210	0.8	1150	TO-220	31
FS10VSH-2	100	10	30	±10	158	210	0.8	1150	TO-220S	31
FS10KMH-2	100	10	20	±10	158	210	0.8	1150	TO-220FN	31
FS10SMH-2	100	10	30	±10	158	210	0.8	1150	TO-3P	32
FS30ASH-2	100	30	35	±10	66	93	0.8	2000	MP-3	31
FS30UMH-2	100	30	45	±10	66	93	0.8	2000	TO-220	31
FS30VSH-2	100	30	45	±10	66	93	0.8	2000	TO-220S	31
FS30KMH-2	100	30	25	±10	66	93	0.8	2000	TO-220FN	31
FS30SMH-2	100	30	45	±10	66	93	0.8	2000	TO-3P	32
FS50UMH-2	100	50	70	±10	38	52	0.8	4000	TO-220	31
FS50VSH-2	100	50	70	±10	38	52	0.8	4000	TO-220S	31
FS50KMH-2	100	50	30	±10	38	52	0.8	4000	TO-220FN	31
FS50SMH-2	100	50	70	±10	38	52	0.8	4000	TO-3P	32
FS70UMH-2	100	70	125	±10	10	19	0.8	11000	TO-220	31
FS70VSH-2	100	70	125	±10	10	19	0.8	11000	TO-220S	31
FS70KMH-2	100	70	35	±10	10	19	0.8	11000	TO-220FN	31
FS70SMH-2	100	70	150	±10	10	19	0.8	11000	TO-3P	32
FS2ASH-3	150	2	20	±10	580	750	0.8	540	MP-3	31
FS2UMH-3	150	2	20	±10	580	750	0.8	540	TO-220	31
FS2VSH-3	150	2	20	±10	580	750	0.8	540	TO-220S	31
FS2KMH-3	150	2	15	±10	580	750	0.8	540	TO-220FN	31
FS5ASH-3	150	5	30	±10	268	350	0.8	1200	MP-3	31
FS5UMH-3	150	5	30	±10	268	350	0.8	1200	TO-220	31
FS5VSH-3	150	5	30	±10	268	350	0.8	1200	TO-220S	31
FS5KMH-3	150	5	20	±10	268	350	0.8	1200	TO-220FN	31
FS5SMH-3	150	5	30	±10	268	350	0.8	1200	TO-3P	32
FS10ASH-3	150	10	35	±10	120	160	0.8	2000	MP-3	31
FS10UMH-3	150	10	45	±10	120	160	0.8	2000	TO-220	31
FS10VSH-3	150	10	45	±10	120	160	0.8	2000	TO-220S	31
FS10KMH-3	150	10	25	±10	120	160	0.8	2000	TO-220FN	31
FS10SMH-3	150	10	45	±10	120	160	0.8	2000	TO-3P	32
FS30UMH-3	150	30	70	±10	67	87	0.8	4000	TO-220	31
FS30VSH-3	150	30	70	±10	67	87	0.8	4000	TO-220S	31
FS30KMH-3	150	30	30	±10	67	87	0.8	4000	TO-220FN	31
FS30SMH-3	150	30	70	±10	67	87	0.8	4000	TO-3P	32
FS50UMH-3	150	50	125	±10	18	30	0.8	11000	TO-220	31
FS50VSH-3	150	50	125	±10	18	30	0.8	11000	TO-220S	31
FS50KMH-3	150	50	35	±10	18	30	0.8	11000	TO-220FN	31
FS50SMH-3	150	50	150	±10	18	30	0.8	11000	TO-3P	32

r<sub>DS(on)</sub> (mΩ) - shows maximum value of on-resistance at V<sub>GS</sub> = 4V

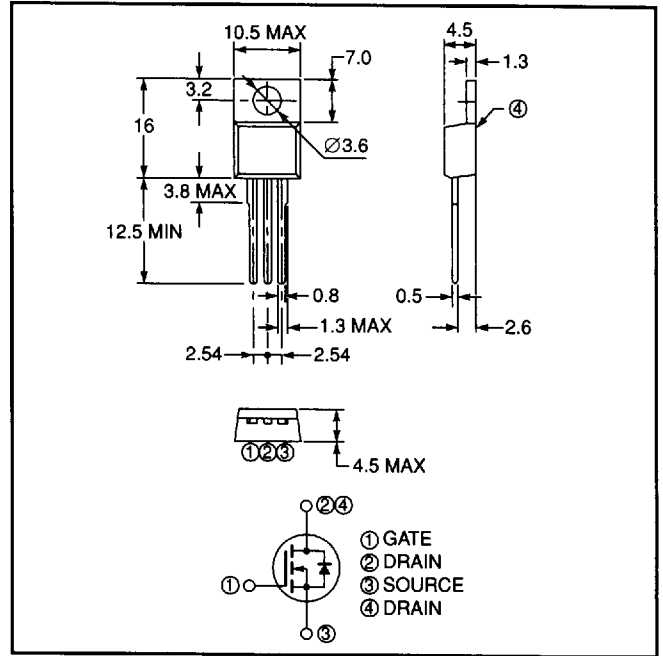
## Device Outline Drawings

### MP-3



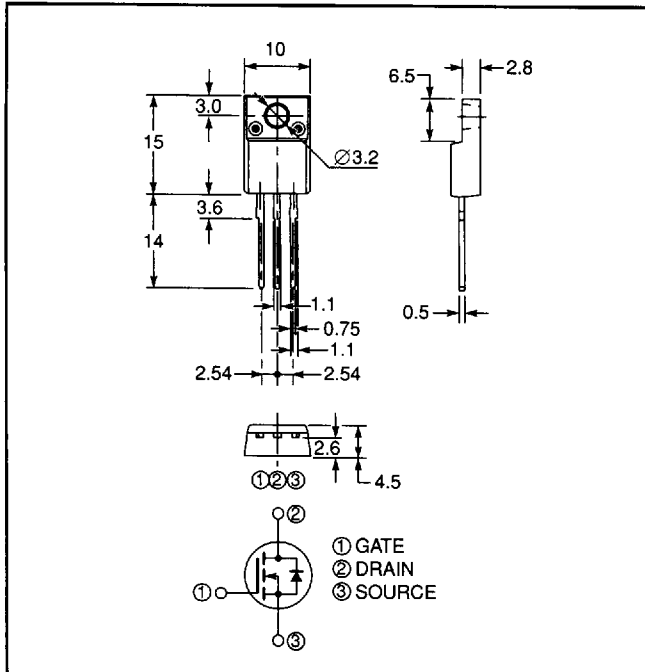
IGBT CT\*\*AS-8  
 MOSFET FS\*\*AS-8

### TO-220



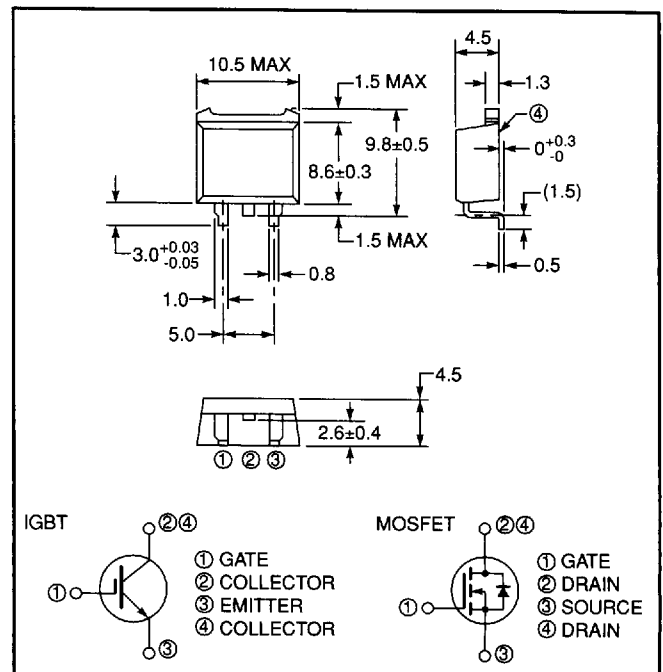
MOSFET FK\*\*UM-\*\*, FS\*\*UM-\*\*

### TO-220FN



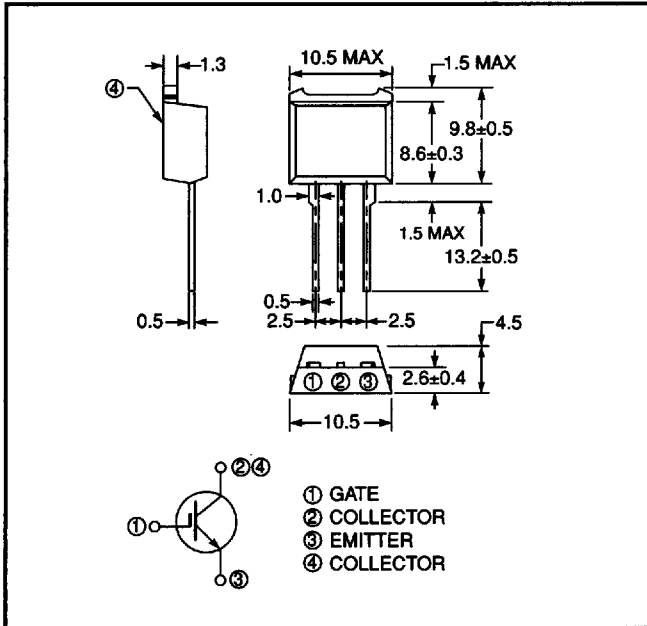
MOSFET FK\*\*KM-\*\*, FS\*\*KM-\*\*

### TO-220S



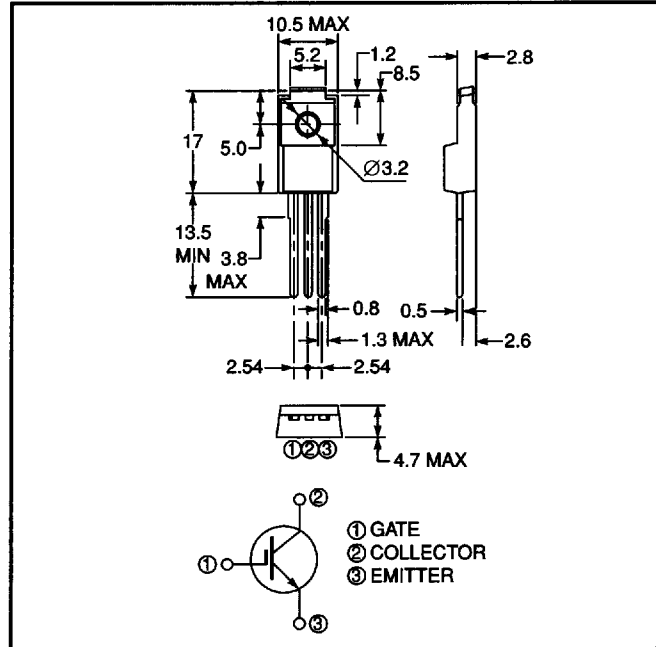
IGBT CT\*\*VS-8  
 MOSFET FK\*\*VS-\*\*, FS\*\*VS-\*\*

### TO-220C



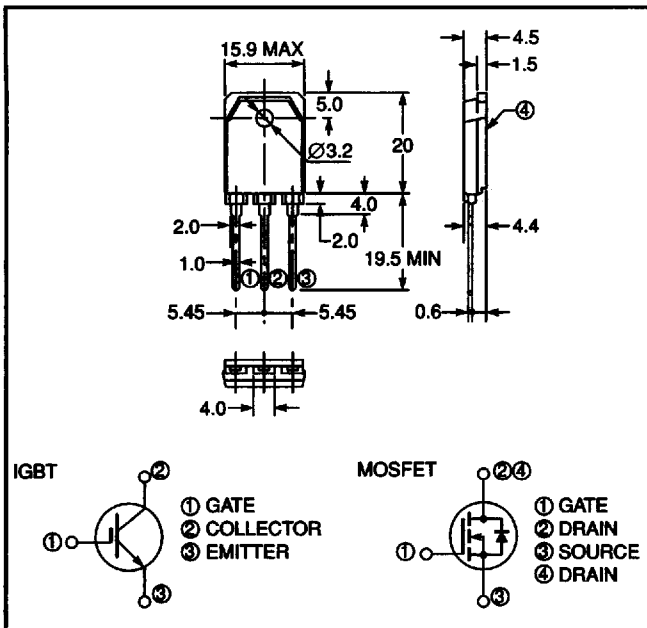
IGBT CT\*\*VM-8

### TO-220F



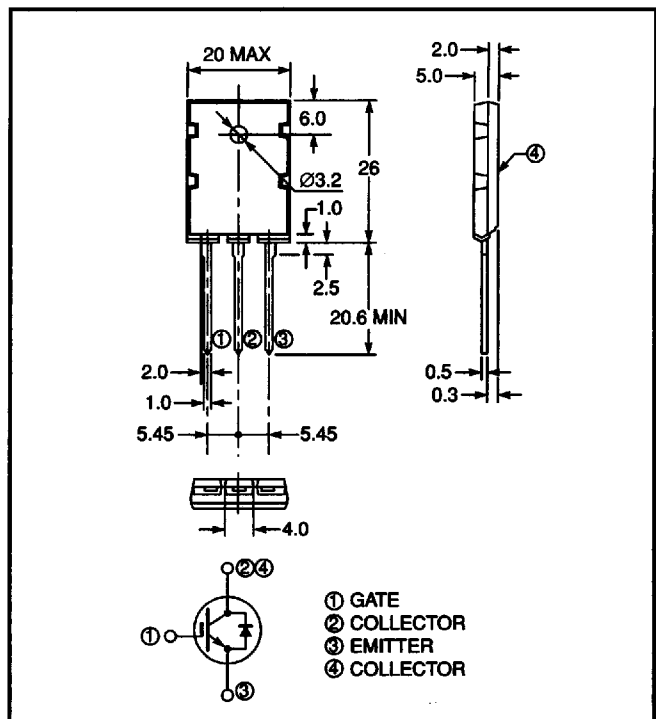
IGBT CT\*\*TM-\*\*

### TO-3P



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

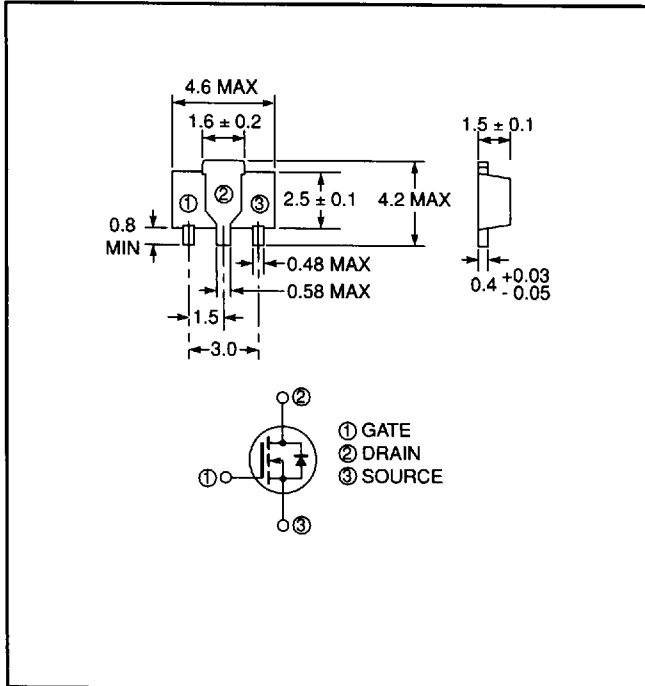
### TO-3PL



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

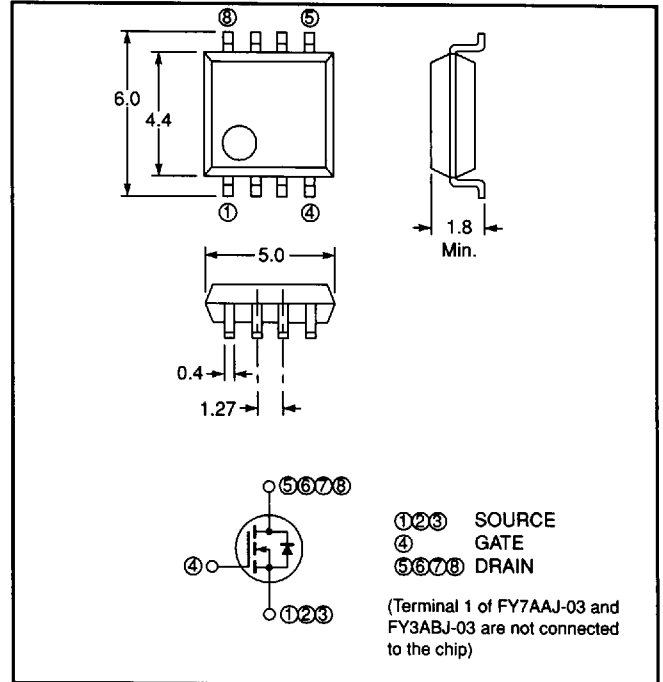
## Device Outline Drawings

### SOT-89



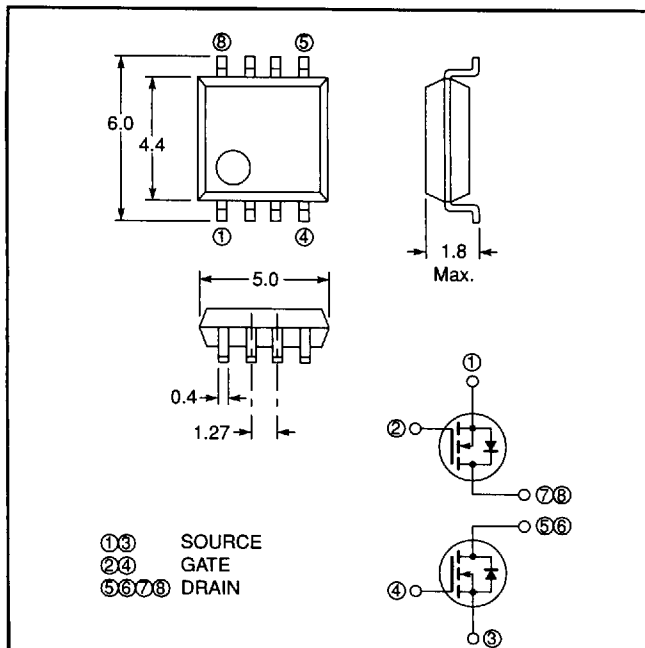
MOSFET FS\*\*, FX\*\*

### SOP-8 (Single)



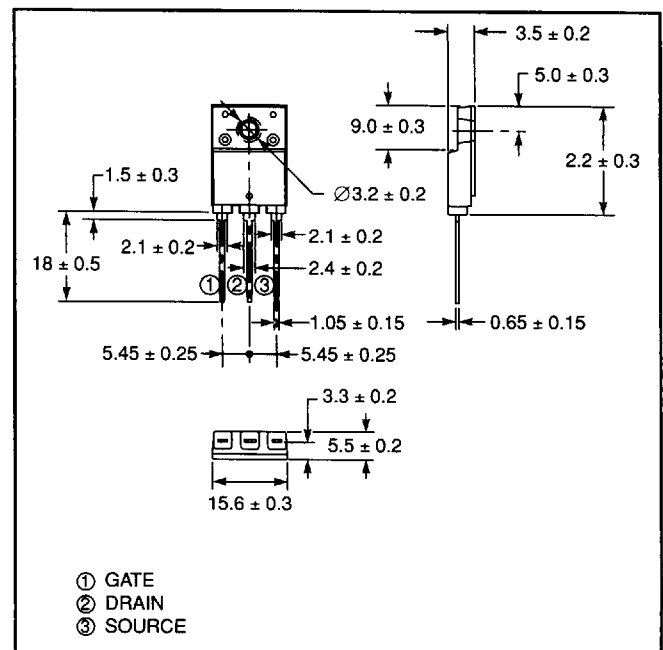
MOSFET FY\*\*

### SOP-8 (Dual)



MOSFET FY\*\*

### TO-3PF



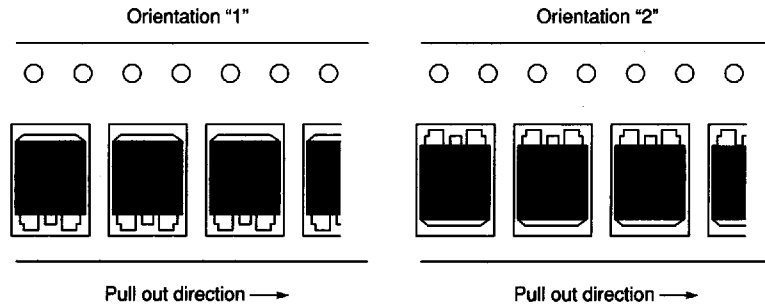
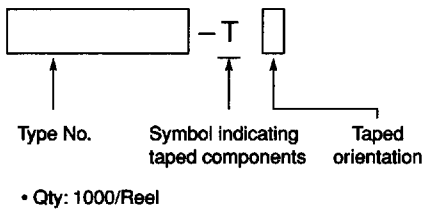
MOSFET FS\*\*RM-\*\*

### 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

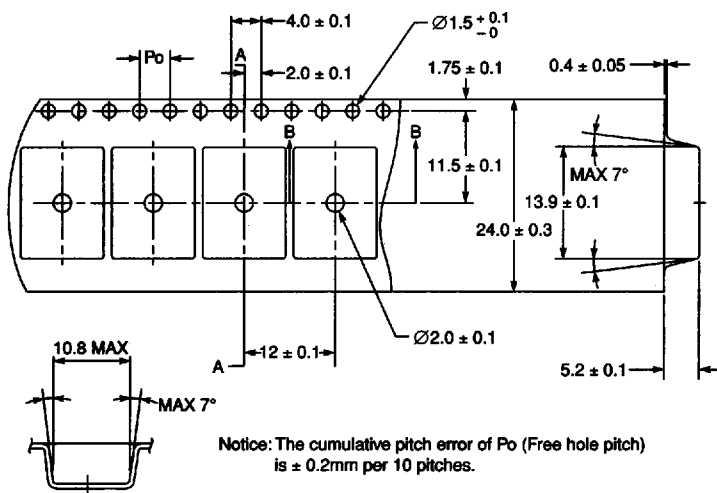
### TO-220S Taping

#### (a) Marking

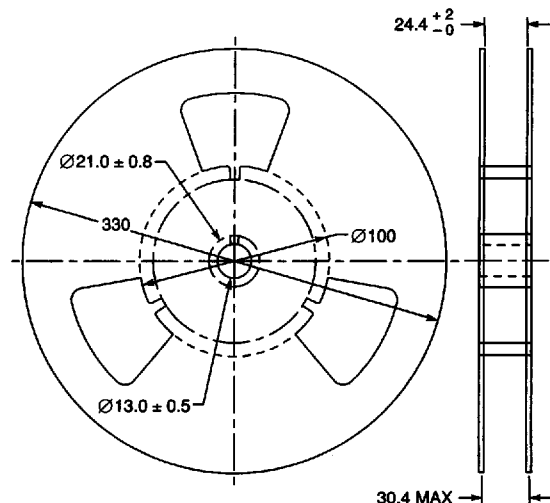


#### (b) Taping

##### • Tape Shape and Dimensions

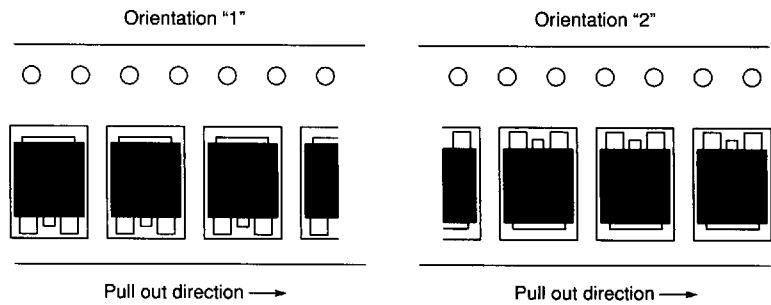
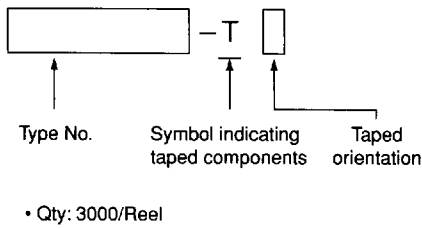


##### • Reel Shape and Dimensions



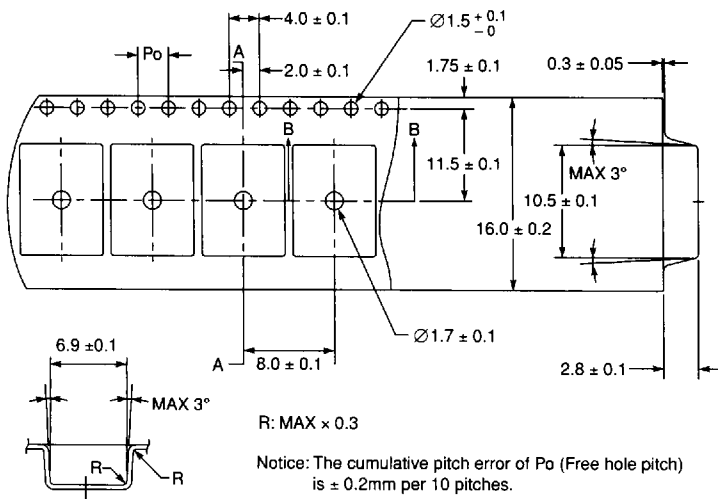
### MP-3 Taping

#### (a) Marking



#### (b) Taping

##### • Tape Shape and Dimensions



##### • Reel Shape and Dimensions

