



Powerex, Inc., 200 Hillis Street, Youngwood, Pennsylvania 15697-1800 (412) 925-7272

## Short Form Data Selector Guide

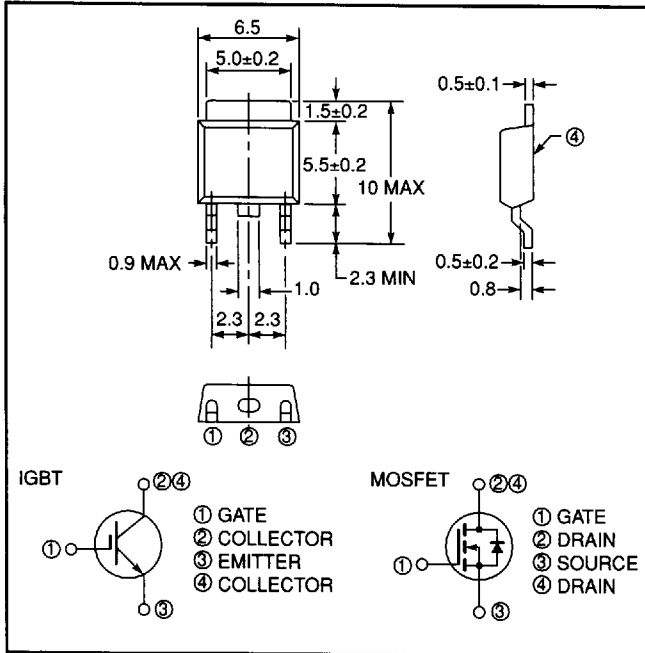
### Discrete MOSFET - Low Voltage Trench Gate 10.0V Driver Voltage n-channel MOSFETs

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)		
					Typ.	Max.			Outline	Page
FS10AS-03	30	10	20	±20	72	95	3	280	MP-3	31
FS10UM-03	30	10	20	±20	72	95	3	280	TO-220	31
FS10VS-03	30	10	20	±20	72	95	3	280	TO-220S	31
FS10KM-03	30	10	15	±20	72	95	3	280	TO-220FN	31
FS30AS-03	30	30	30	±20	36	46	3	600	MP-3	31
FS30UM-03	30	30	30	±20	36	46	3	600	TO-220	31
FS30VS-03	30	30	30	±20	36	46	3	600	TO-220S	31
FS30KM-03	30	30	20	±20	36	46	3	600	TO-220FN	31
FS30SM-03	30	30	30	±20	36	46	3	600	TO-3P	32
FS50AS-03	30	50	35	±20	17	23	3	1300	MP-3	31
FS50UM-03	30	50	45	±20	17	23	3	1300	TO-220	31
FS50VS-03	30	50	45	±20	17	23	3	1300	TO-220S	31
FS50KM-03	30	50	25	±20	17	23	3	1300	TO-220FN	31
FS50SM-03	30	50	45	±20	17	23	3	1300	TO-3P	32
FS70UM-03	30	70	70	±20	11	14	3	2400	TO-220	31
FS70VS-03	30	70	70	±20	11	14	3	2400	TO-220S	31
FS70KM-03	30	70	30	±20	11	14	3	2400	TO-220FN	31
FS70SM-03	30	70	70	±20	11	14	3	2400	TO-3P	32
FS100UM-03	30	100	125	±20	4	5.4	3	6600	TO-220	31
FS100VS-03	30	100	125	±20	4	5.4	3	6600	TO-220S	31
FS100KM-03	30	100	35	±20	4	5.4	3	6600	TO-220FN	31
FS100SM-03	30	100	150	±20	4	5.4	3	6600	TO-3P	32
FS5AS-06	60	5	20	±20	122	160	3	280	MP-3	31
FS5UM-06	60	5	20	±20	122	160	3	280	TO-220	31
FS5VS-06	60	5	20	±20	122	160	3	280	TO-220S	31
FS5KM-06	60	5	15	±20	122	160	3	280	TO-220FN	31
FS10AS-06	60	10	30	±20	58	78	3	600	MP-3	31
FS10UM-06	60	10	30	±20	58	78	3	600	TO-220	31
FS10VS-06	60	10	30	±20	58	78	3	600	TO-220S	31
FS10KM-06	60	10	20	±20	58	78	3	600	TO-220FN	31
FS10SM-06	60	10	30	±20	58	78	3	600	TO-3P	32
FS30AS-06	60	30	35	±20	23	30	3	1450	MP-3	31
FS30UM-06	60	30	45	±20	23	30	3	1450	TO-220	31
FS30VS-06	60	30	45	±20	23	30	3	1450	TO-220S	31
FS30KM-06	60	30	25	±20	23	30	3	1450	TO-220FN	31
FS30SM-06	60	30	45	±20	23	30	3	1450	TO-3P	32
FS50UM-06	60	50	70	±20	17	22	3	2300	TO-220	31
FS50VS-06	60	50	70	±20	17	22	3	2300	TO-220S	31
FS50KM-06	60	50	30	±20	17	22	3	2300	TO-220FN	31
FS50SM-06	60	50	70	±20	17	22	3	2300	TO-3P	32
FS70UM-06	60	70	125	±20	5.7	7.5	3	6750	TO-220	31
FS70VS-06	60	70	125	±20	5.7	7.5	3	6750	TO-220S	31
FS70KM-06	60	70	35	±20	5.7	7.5	3	6750	TO-220FN	31
FS70SM-06	60	70	150	±20	5.7	7.5	3	6750	TO-3P	32

r<sub>DS(on)</sub> (mΩ) - shows maximum value of on-resistance at V<sub>GS</sub> = 10V

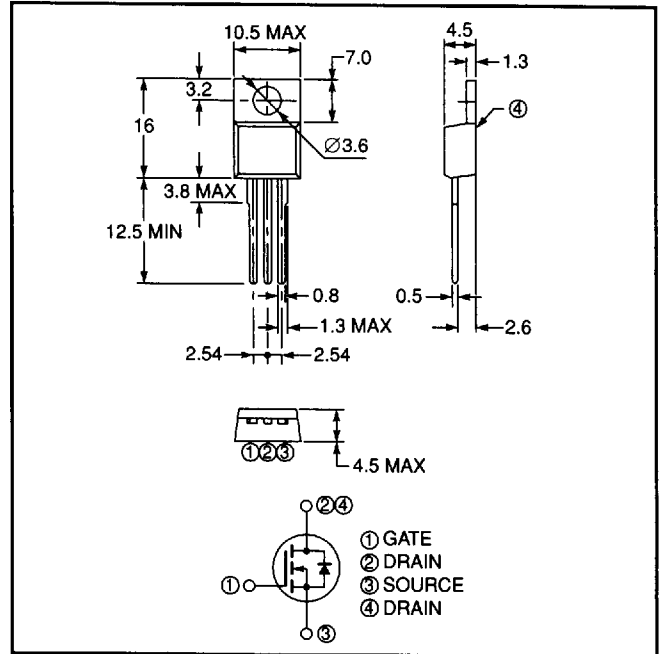
## Device Outline Drawings

### MP-3



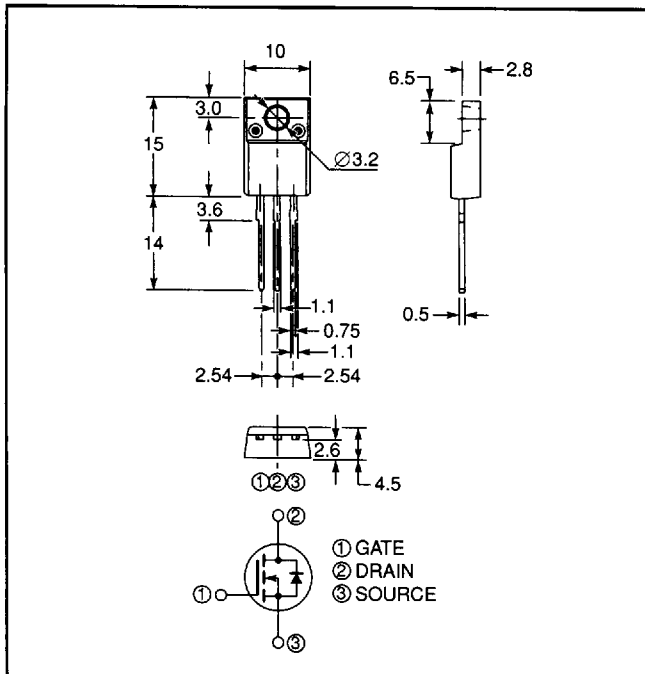
IGBT CT\*\*AS-8  
 MOSFET FS\*\*AS-8

### TO-220



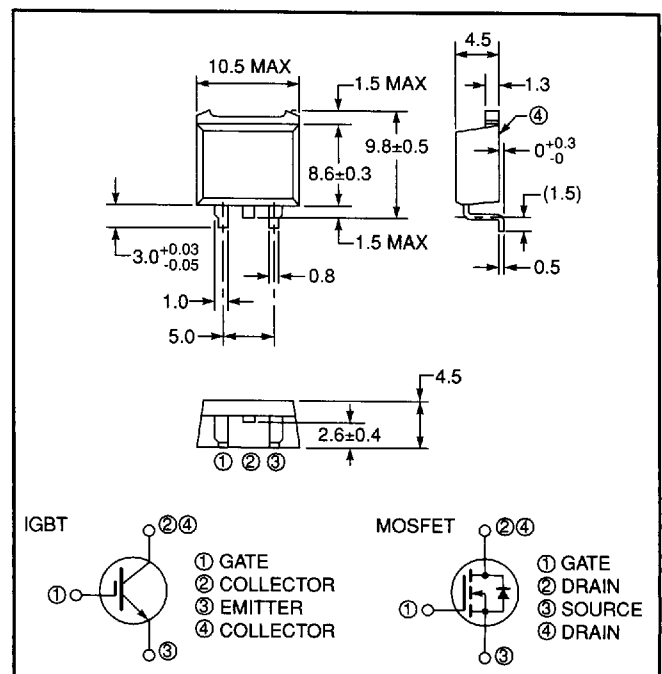
MOSFET FK\*\*UM-\*\*, FS\*\*UM-\*\*

### TO-220FN



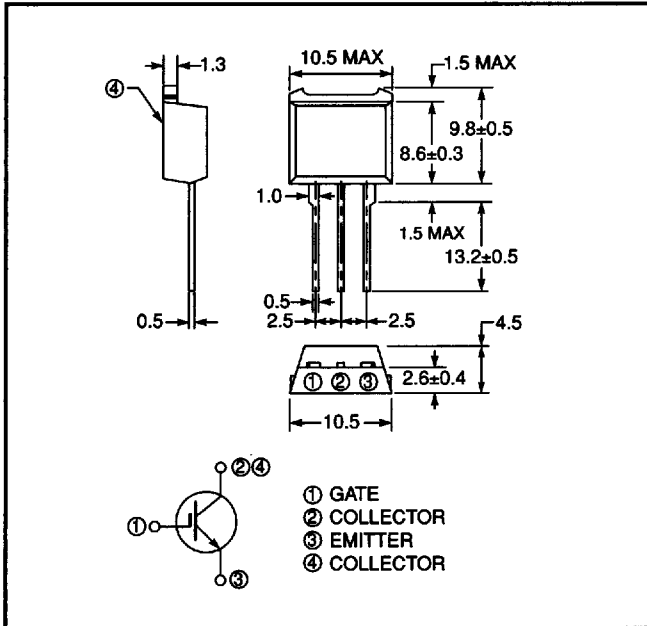
MOSFET FK\*\*KM-\*\*, FS\*\*KM-\*\*

### TO-220S



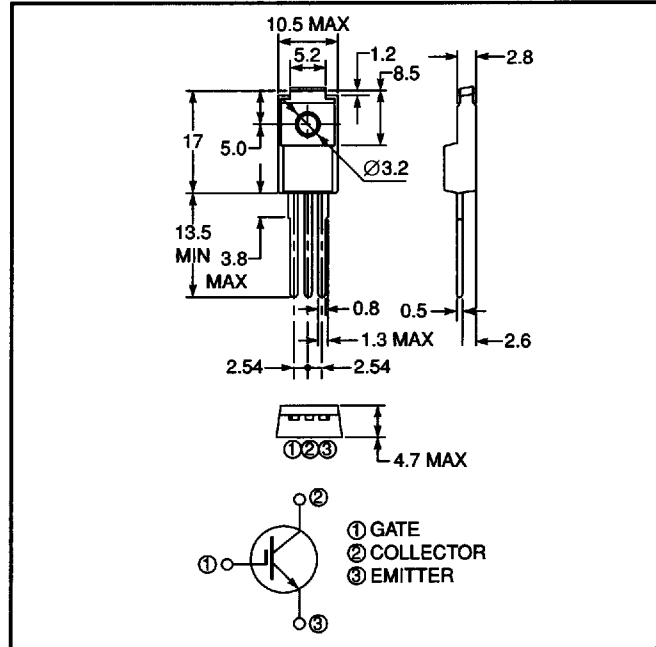
IGBT CT\*\*VS-8  
 MOSFET FK\*\*VS-\*\*, FS\*\*VS-\*\*

### TO-220C



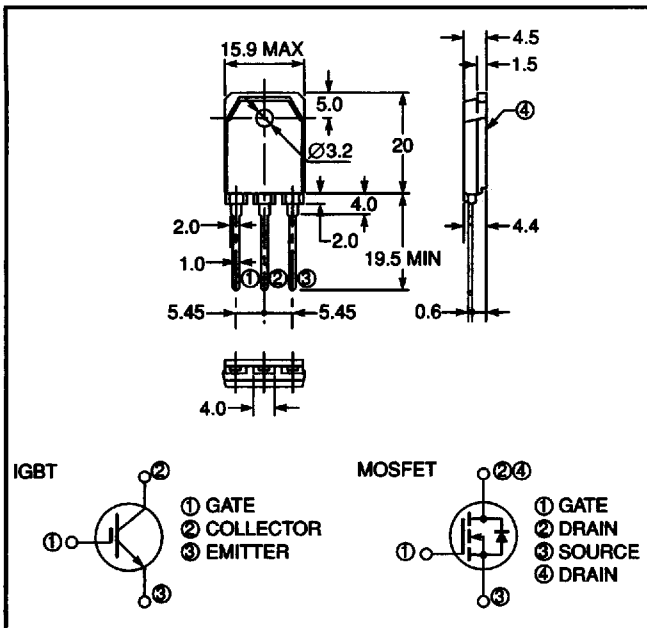
IGBT CT\*\*VM-8

### TO-220F



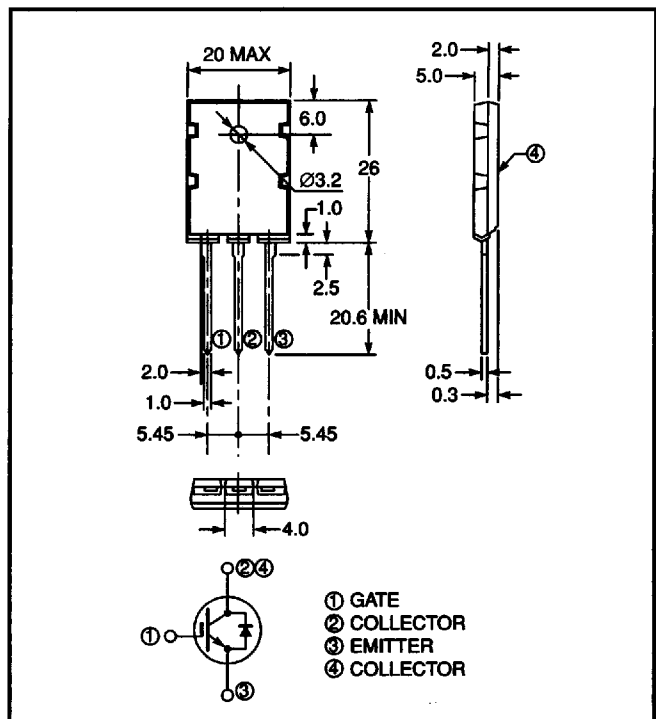
IGBT CT\*\*TM-\*\*

### TO-3P



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

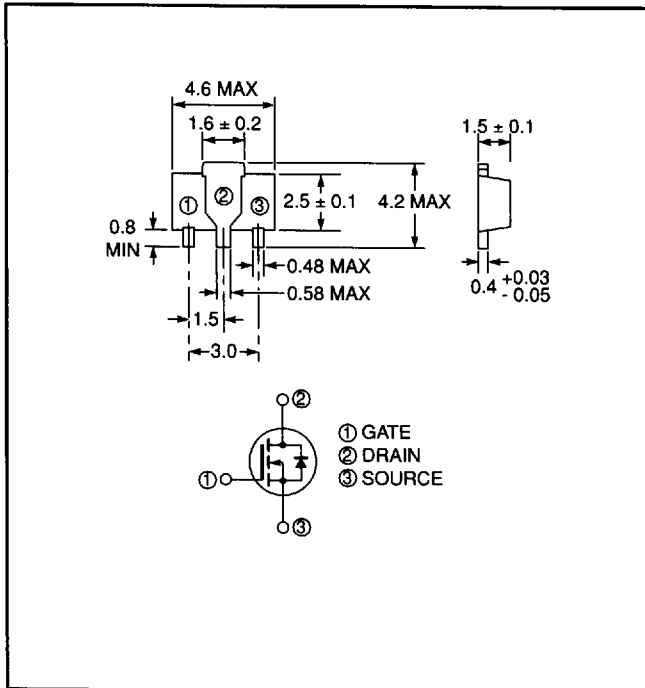
### TO-3PL



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

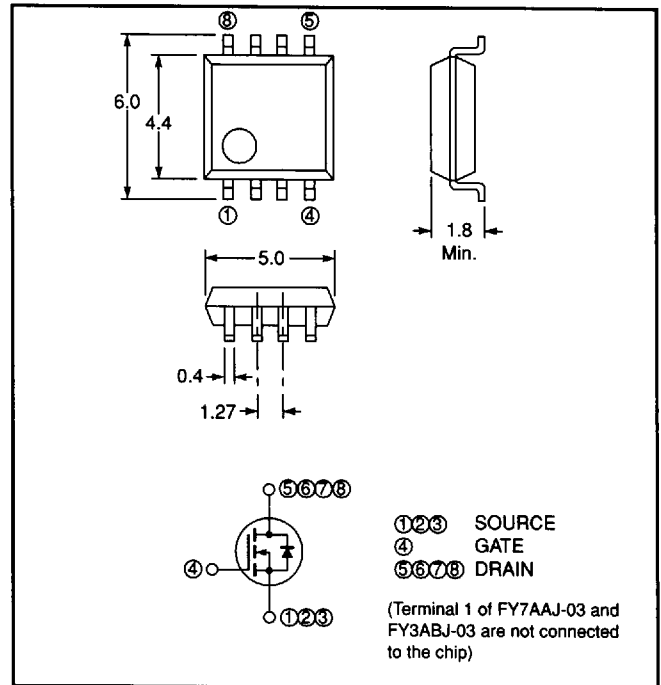
## Device Outline Drawings

### SOT-89



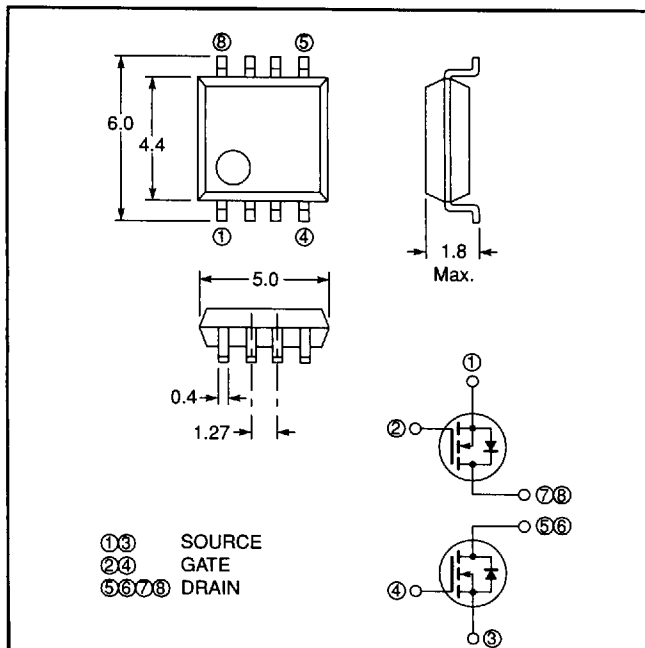
MOSFET FS\*\*, FX\*\*

### SOP-8 (Single)



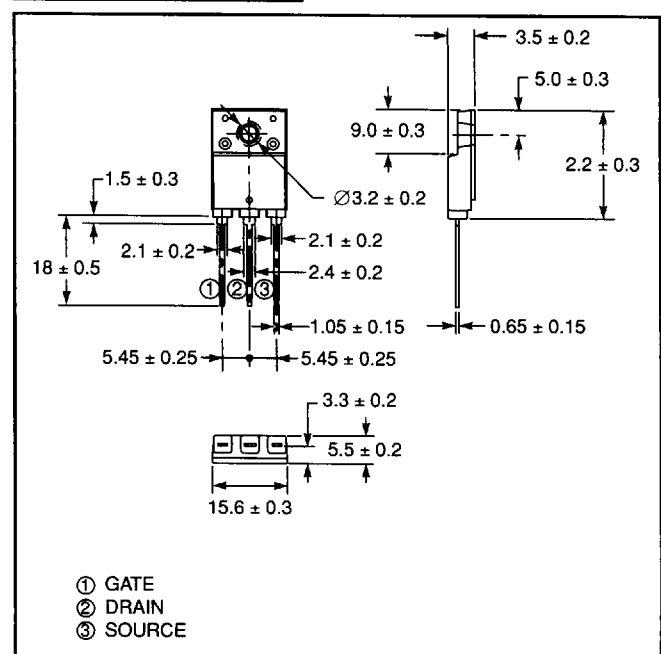
MOSFET FY\*\*

### SOP-8 (Dual)



MOSFET FY\*\*

### TO-3PF



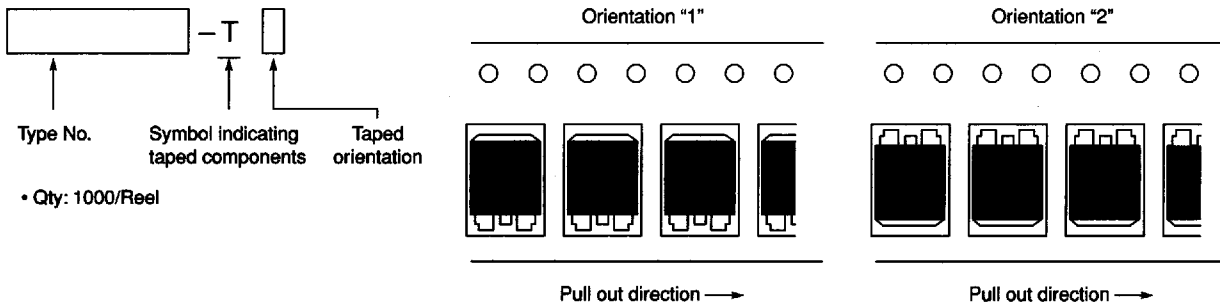
MOSFET FS\*\*RM-\*\*

### 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

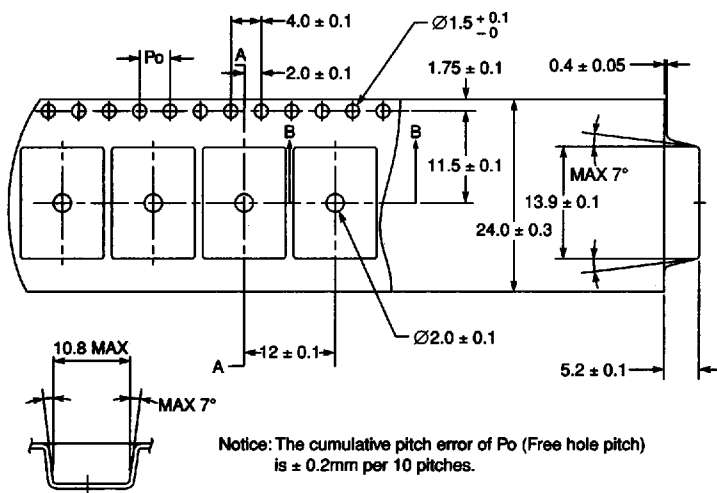
### TO-220S Taping

#### (a) Marking

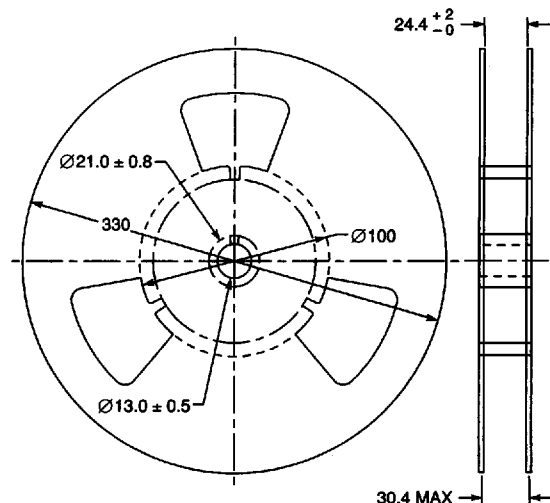


#### (b) Taping

##### • Tape Shape and Dimensions

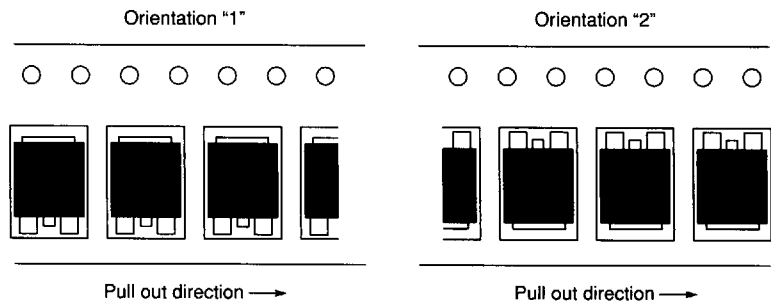
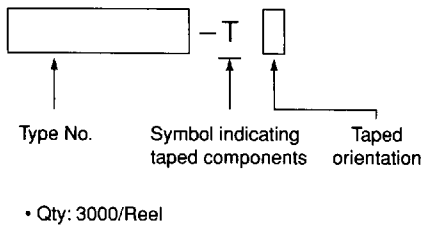


##### • Reel Shape and Dimensions



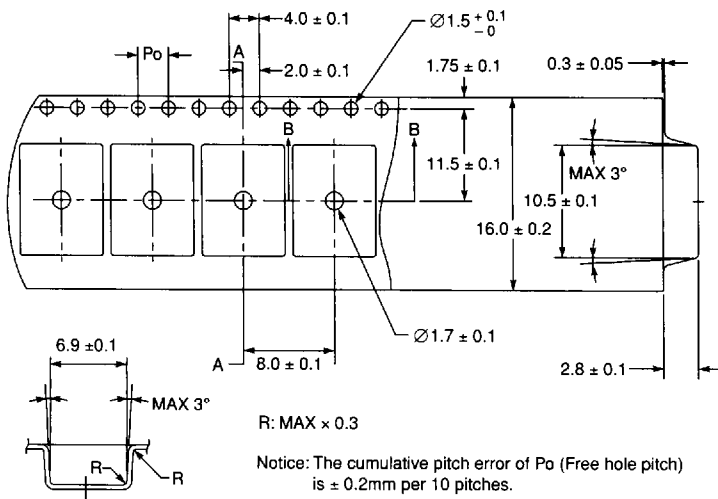
### MP-3 Taping

#### (a) Marking



#### (b) Taping

##### • Tape Shape and Dimensions



##### • Reel Shape and Dimensions

