



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

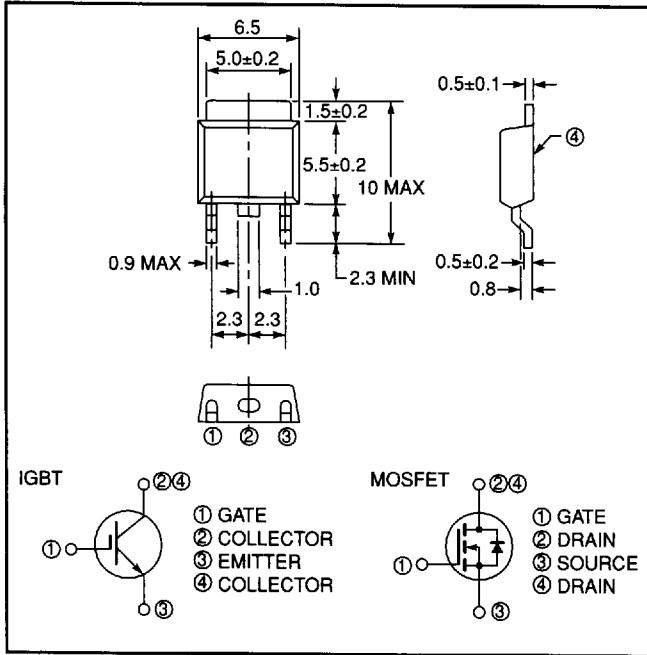
## Short Form Data Selector Guide

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

Device Number	Maximum Ratings, $T_c = 25^\circ\text{C}$			Electrical Characteristics				Package	
	$V_{DSS}$ (V)	$I_D$ (A)	$V_{GSS}$ (V)	$r_{DS(on)}$ (m $\Omega$ )		$V_{GS(th)}$ (V)	$C_{iss}$ (pF)	Outline	Page
				Typ.	Max.				
FX6AS-03	-30	-6	$\pm 20$	250	330	-3	420	MP-3	31
FX6KM-03	-30	-6	$\pm 20$	250	330	-3	420	TO-220FN	31
FX6UM-03	-30	-6	$\pm 20$	250	330	-3	420	TO-220	31
FX6VS-03	-30	-6	$\pm 20$	250	330	-3	420	TO-220S	31
FX3AS-06	-60	-3	$\pm 20$	420	540	-3	420	MP-3	31
FX3KM-06	-60	-3	$\pm 20$	420	540	-3	420	TO-220FN	31
FX3UM-06	-60	-3	$\pm 20$	420	540	-3	420	TO-220	31
FX3VS-06	-60	-3	$\pm 20$	420	540	-3	420	TO-220S	31
FX6AS-06	-60	-6	$\pm 20$	190	240	-3	865	MP-3	31
FX6KM-06	-60	-6	$\pm 20$	190	240	-3	865	TO-220FN	31
FX6UM-06	-60	-6	$\pm 20$	190	240	-3	865	TO-220	31
FX6VS-06	-60	-6	$\pm 20$	190	240	-3	865	TO-220S	31
FX6SM-06	-60	-6	$\pm 20$	190	240	-3	865	TO-3P	32
FX20AS-06	-60	-20	$\pm 20$	92	120	-3	1645	MP-3	31
FX20KM-06	-60	-20	$\pm 20$	92	120	-3	1645	TO-220FN	31
FX20UM-06	-60	-20	$\pm 20$	92	120	-3	1645	TO-220	31
FX20VS-06	-60	-20	$\pm 20$	92	120	-3	1645	TO-220S	31
FX20SM-06	-60	-20	$\pm 20$	92	120	-3	1645	TO-3P	32
FX30KM-06	-60	-30	$\pm 20$	48	63	-3	3325	TO-220FN	31
FX30UM-06	-60	-30	$\pm 20$	48	63	-3	3325	TO-220	31
FX30VS-06	-60	-30	$\pm 20$	48	63	-3	3325	TO-220S	31
FX30SM-06	-60	-30	$\pm 20$	48	63	-3	3325	TO-3P	32
FX50KM-06	-60	-50	$\pm 20$	17	22	-3	9245	TO-220FN	31
FX50UM-06	-60	-50	$\pm 20$	17	22	-3	9245	TO-220	31
FX50VS-06	-60	-50	$\pm 20$	17	22	-3	9245	TO-220S	31
FX50SM-06	-60	-50	$\pm 20$	17	22	-3	9245	TO-3P	32
FX3AS-2	-100	-3	$\pm 20$	1200	1600	-3	400	MP-3	31
FX3KM-2	-100	-3	$\pm 20$	1200	1600	-3	400	TO-220FN	31
FX3UM-2	-100	-3	$\pm 20$	1200	1600	-3	400	TO-220	31
FX3VS-2	-100	-3	$\pm 20$	1200	1600	-3	400	TO-220S	31
FX6AS-2	-100	-6	$\pm 20$	560	730	-3	770	MP-3	31
FX6KM-2	-100	-6	$\pm 20$	560	730	-3	770	TO-220FN	31
FX6UM-2	-100	-6	$\pm 20$	560	730	-3	770	TO-220	31
FX6VS-2	-100	-6	$\pm 20$	560	730	-3	770	TO-220S	31
FX6SM-2	-100	-6	$\pm 20$	560	730	-3	770	TO-3P	32
FX20AS-2	-100	-20	$\pm 20$	250	320	-3	1875	MP-3	31
FX20KM-2	-100	-20	$\pm 20$	250	320	-3	1875	TO-220FN	31
FX20UM-2	-100	-20	$\pm 20$	250	320	-3	1875	TO-220	31
FX20VS-2	-100	-20	$\pm 20$	250	320	-3	1875	TO-220S	31
FX20SM-2	-100	-20	$\pm 20$	250	320	-3	1875	TO-3P	32
FX30KM-2	-100	-30	$\pm 20$	140	180	-3	3050	TO-220FN	31
FX30UM-2	-100	-30	$\pm 20$	140	180	-3	3050	TO-220	31
FX30VS-2	-100	-30	$\pm 20$	140	180	-3	3050	TO-220S	31
FX30SM-2	-100	-30	$\pm 20$	140	180	-3	3050	TO-3P	32
FX50KM-2	-100	-50	$\pm 20$	46	60	-3	8425	TO-220FN	31
FX50UM-2	-100	-50	$\pm 20$	46	60	-3	8425	TO-220	31
FX50VS-2	-100	-50	$\pm 20$	46	60	-3	8425	TO-220S	31
FX50SM-2	-100	-50	$\pm 20$	46	60	-3	8425	TO-3P	32

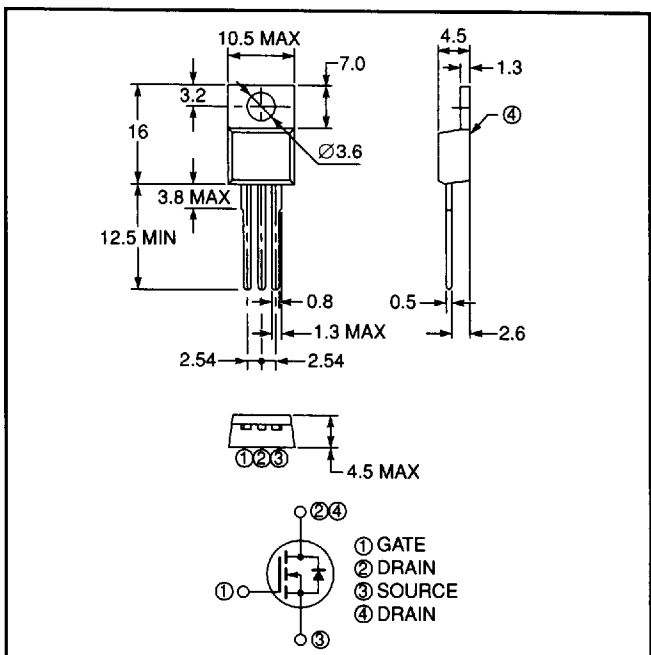
$r_{DS(on)}$  (m $\Omega$ ) - shows maximum value of on-resistance at  $V_{GS} = 10V$

### MP-3



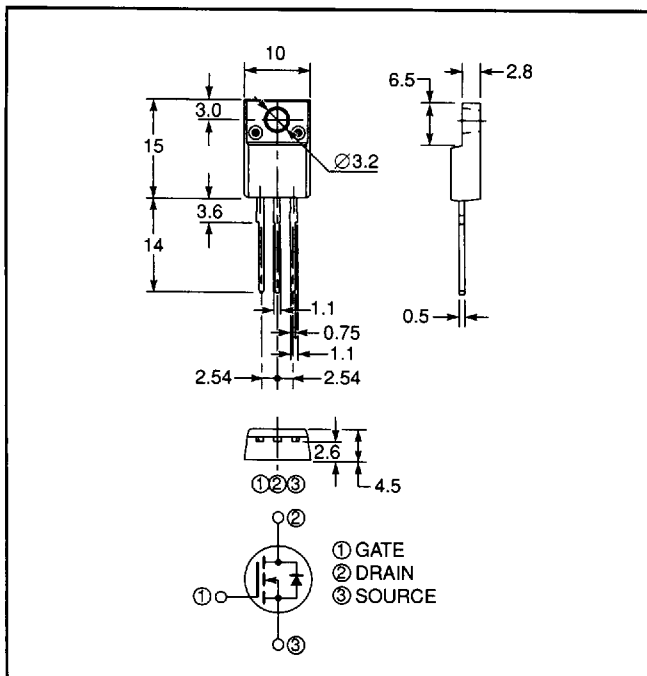
IGBT CT\*\*AS-8  
 MOSFET FS\*\*AS-8

### TO-220



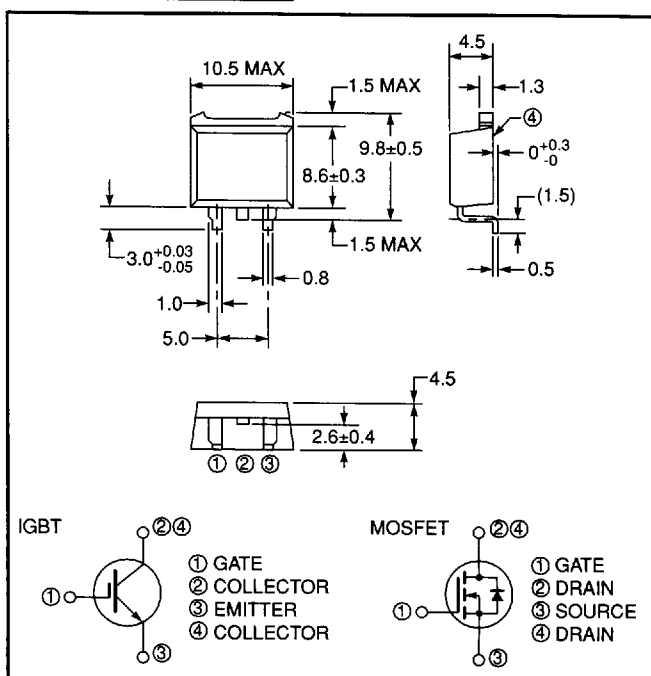
MOSFET FK\*\*UM-\*\*, FS\*\*UM-\*\*

### TO-220FN



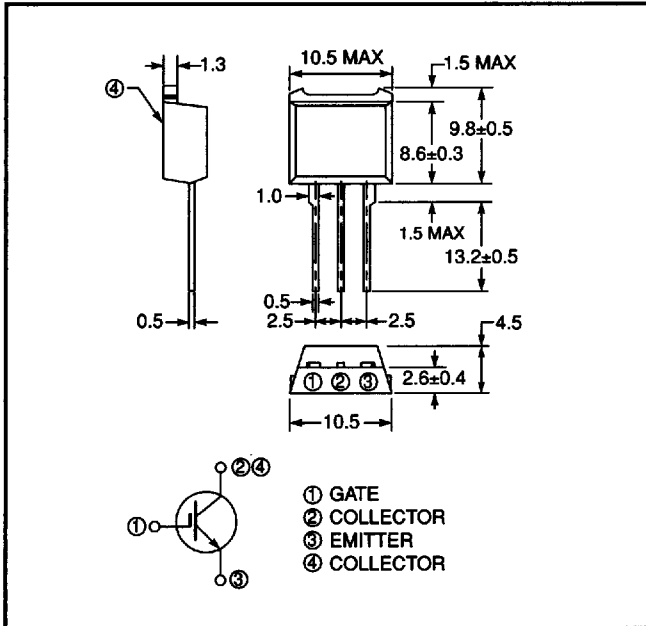
MOSFET FK\*\*KM-\*\*, FS\*\*KM-\*\*

### TO-220S



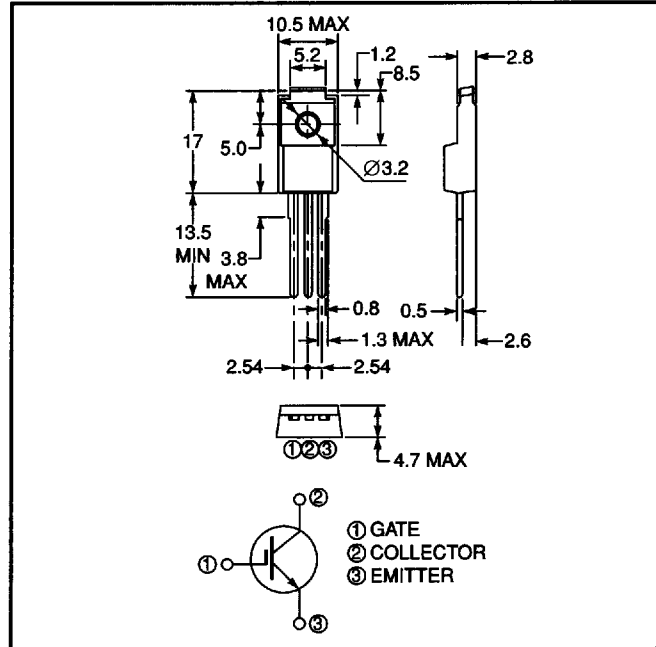
IGBT CT\*\*VS-8  
 MOSFET FK\*\*VS-\*\*, FS\*\*VS-\*\*

### TO-220C



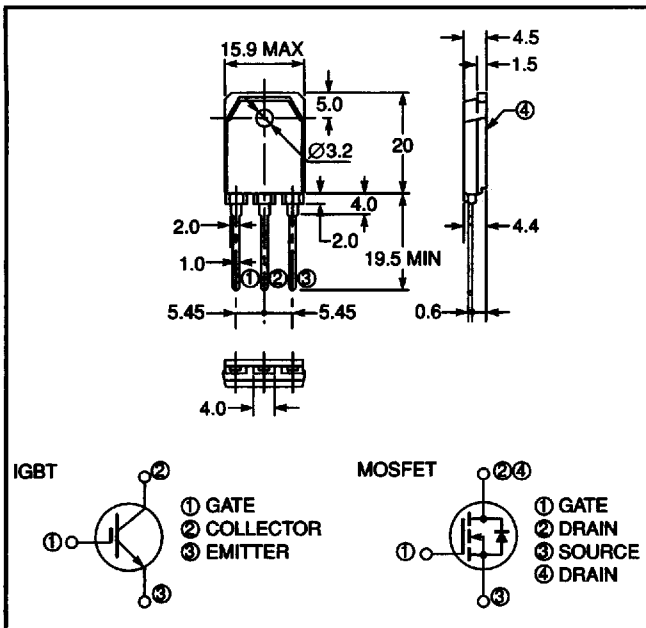
IGBT CT\*\*VM-8

### TO-220F



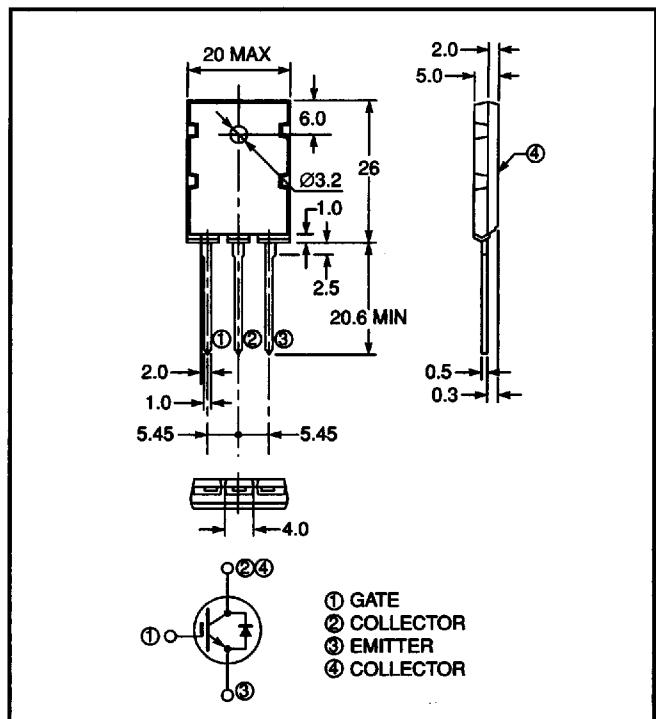
IGBT CT\*\*TM-\*\*

### TO-3P



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

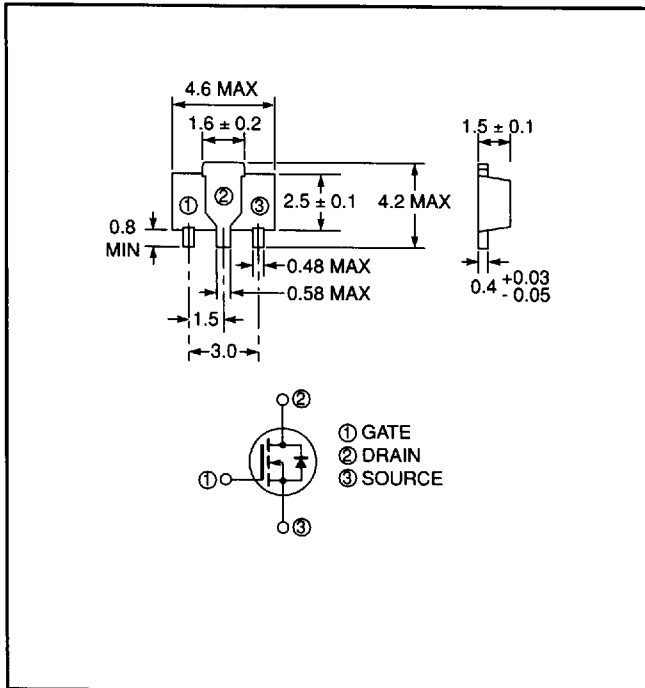
### TO-3PL



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

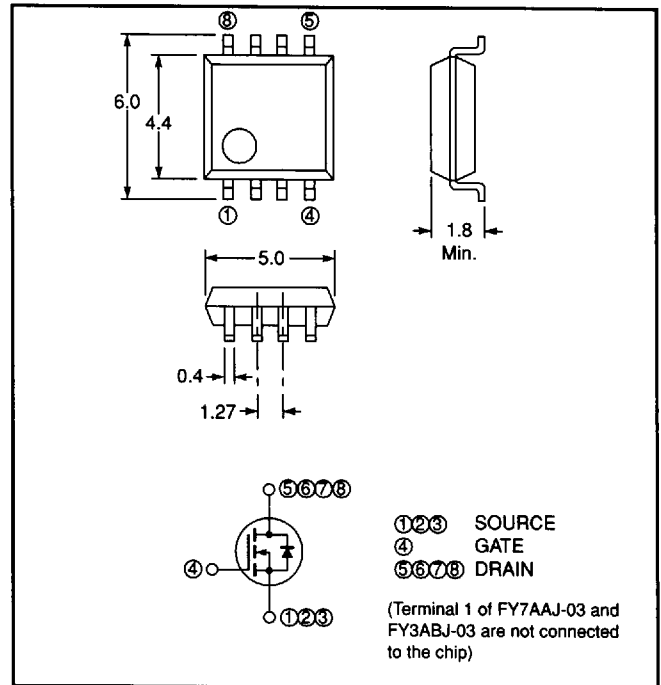
## Device Outline Drawings

### SOT-89



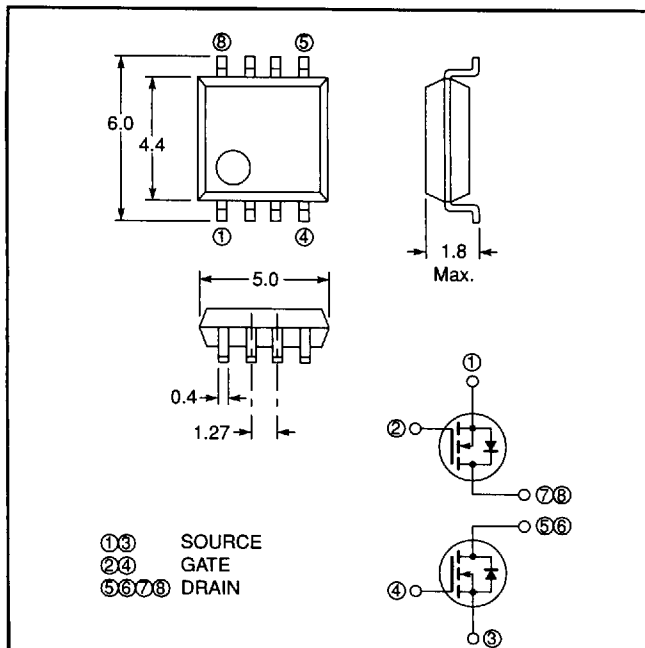
MOSFET FS\*\*, FX\*\*

### SOP-8 (Single)



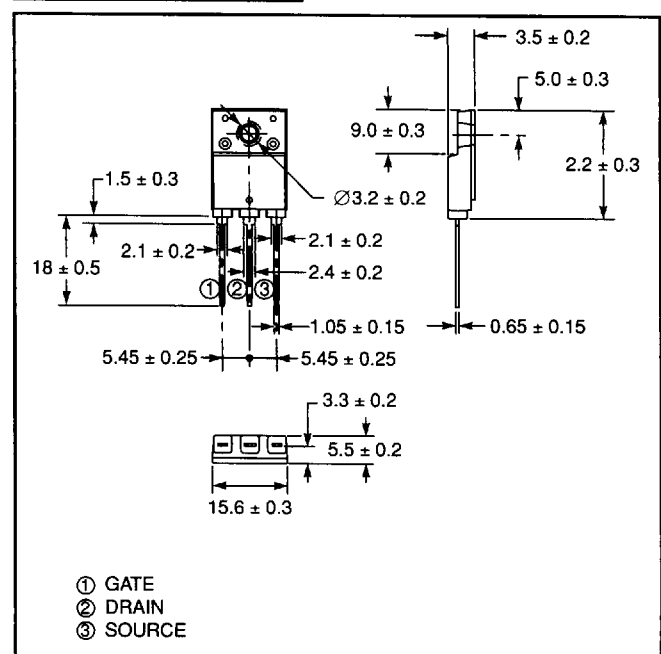
MOSFET FY\*\*

### SOP-8 (Dual)



MOSFET FY\*\*

### TO-3PF



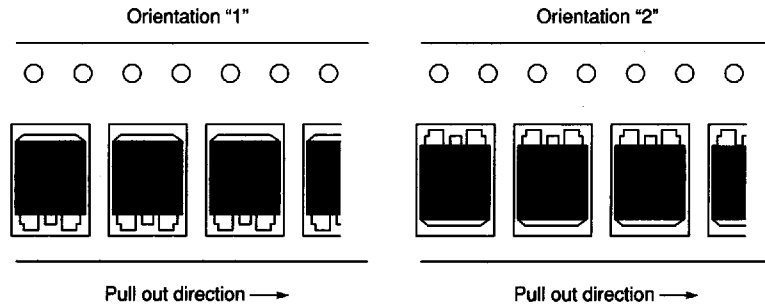
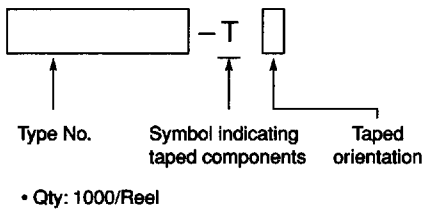
MOSFET FS\*\*RM-\*\*

### 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

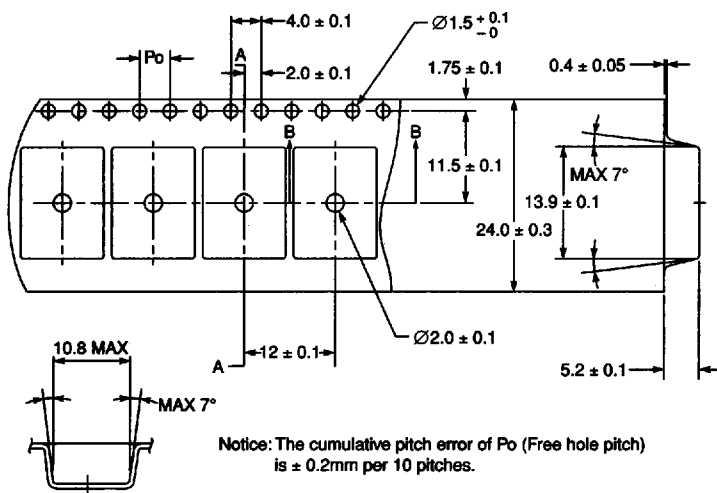
### TO-220S Taping

#### (a) Marking

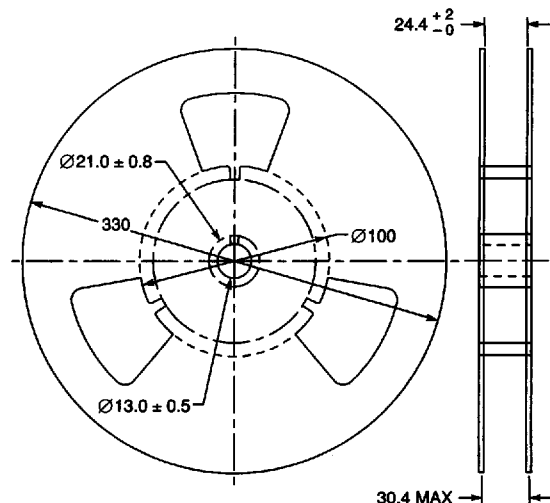


#### (b) Taping

##### • Tape Shape and Dimensions

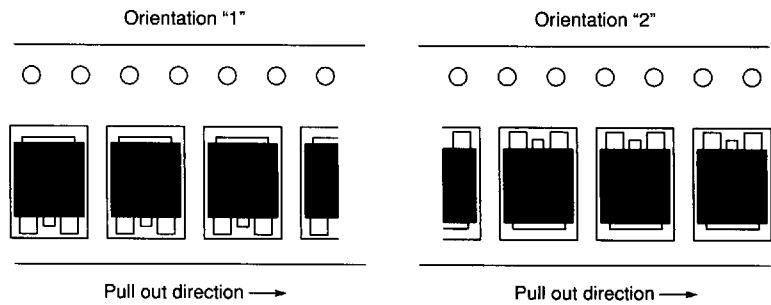
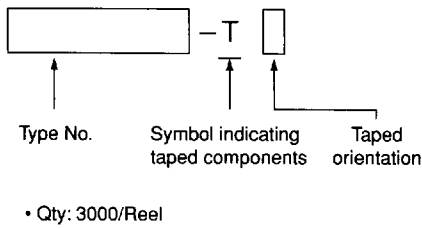


##### • Reel Shape and Dimensions



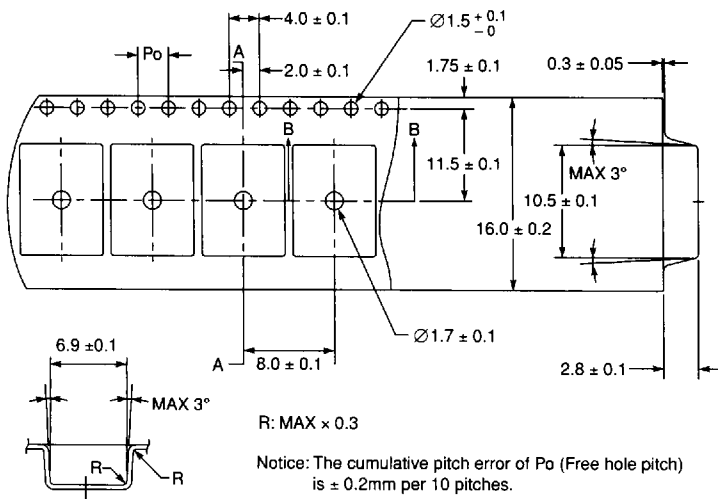
### MP-3 Taping

#### (a) Marking

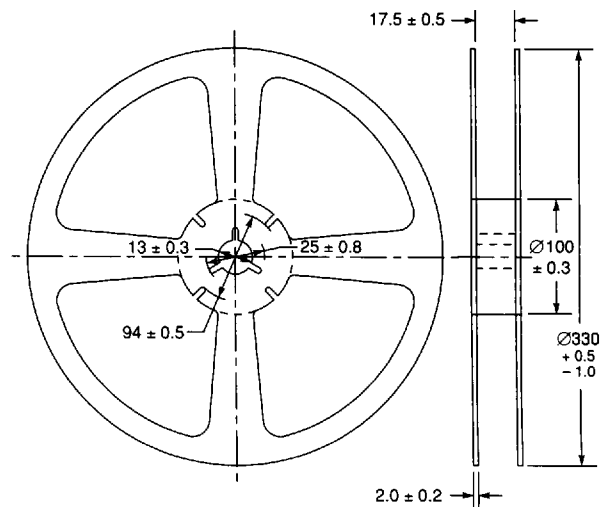


#### (b) Taping

##### • Tape Shape and Dimensions

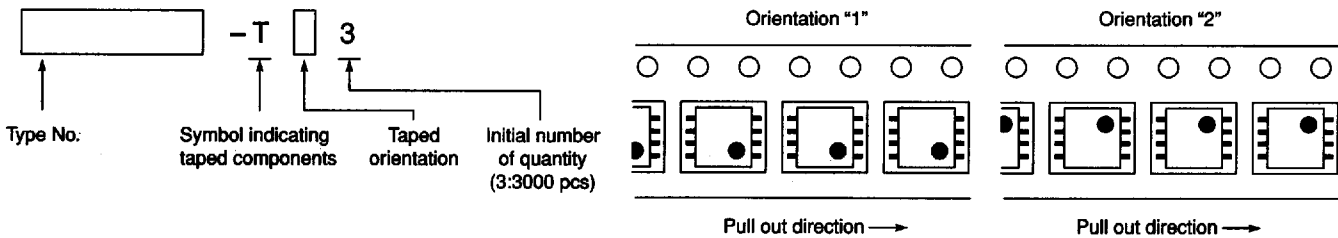


##### • Reel Shape and Dimensions



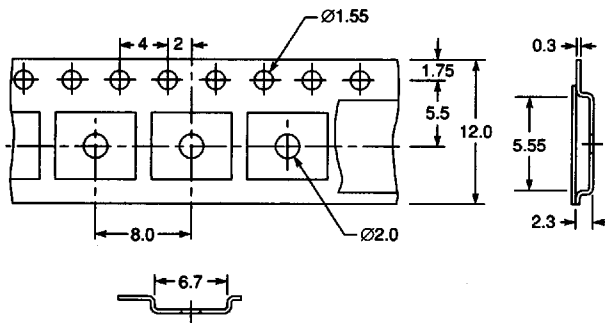
### SOP-8 Taping

#### (a) Marking

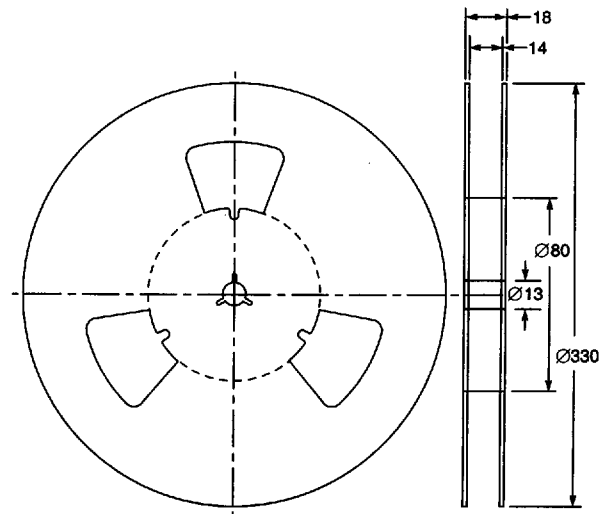


#### (b) Taping

- Tape Shape and Dimensions

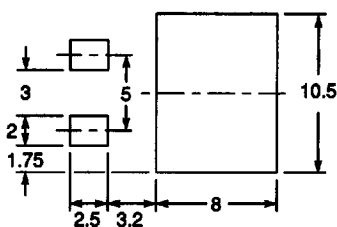


- Reel Shape and Dimensions

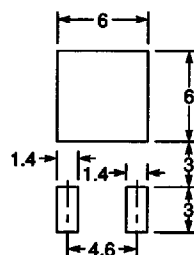


### Recommended Mounting Pad

#### TO-220S Package



#### MP-3 Package



#### SOP-8 Package

