

# 2SK3460

External dimensions 1 ..... FM20

## Absolute Maximum Ratings (Ta = 25°C)

Symbol	Ratings	Unit
V <sub>DSS</sub>	150	V
V <sub>GSS</sub>	+20, -10	V
I <sub>D</sub>	±18	A
I <sub>D</sub> (pulse) *1	±72	A
P <sub>D</sub>	35 (T <sub>c</sub> = 25°C)	W
EAS *2	180	mJ
I <sub>AS</sub>	18	A
T <sub>ch</sub>	150	°C
T <sub>stg</sub>	-55 to +150	°C

\*1: P<sub>w</sub> ≤ 100μs, duty cycle ≤ 1%

\*2: V<sub>DD</sub> = 25V, L = 930μH, I<sub>Lp</sub> = 18A, unclamped, R<sub>G</sub> = 50Ω, See Figure 1 on Page 5.

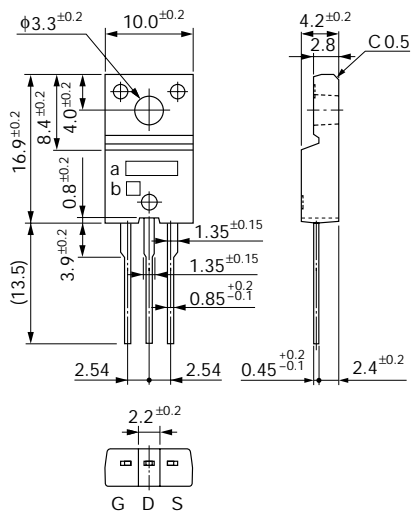
## Electrical Characteristics (Ta = 25°C)

Symbol	Ratings			Unit	Conditions
	min	typ	max		
V <sub>(BR)DSS</sub>	150			V	I <sub>D</sub> = 100μA, V <sub>GS</sub> = 0V
I <sub>GSS</sub>			±100	nA	V <sub>GS</sub> = +20V, -10V
I <sub>DSS</sub>			100	μA	V <sub>DS</sub> = 150V, V <sub>GS</sub> = 0V
V <sub>TH</sub>	1.0		2.0	V	V <sub>DS</sub> = 10V, I <sub>D</sub> = 250μA
Re(yfs)	13	20		S	V <sub>DS</sub> = 10V, I <sub>D</sub> = 9A
R <sub>DS(on)</sub>		70	95	mΩ	V <sub>GS</sub> = 10V, I <sub>D</sub> = 9A
		80	105		V <sub>GS</sub> = 4V, I <sub>D</sub> = 9A
C <sub>iss</sub>		1900		pF	V <sub>DS</sub> = 10V, f = 1.0MHz, V <sub>GS</sub> = 0V
C <sub>oss</sub>		630		pF	
C <sub>rss</sub>		420		pF	
t <sub>d(on)</sub>		25		ns	
t <sub>r</sub>		70		ns	I <sub>D</sub> = 9A, V <sub>DD</sub> ≐ 70V, R <sub>L</sub> = 7.8Ω, V <sub>GS</sub> = 10V, See Figure 2 on Page 5.
t <sub>d(off)</sub>		160		ns	
t <sub>f</sub>		75		ns	
V <sub>SD</sub>		1.0	1.5	V	I <sub>SD</sub> = 18A, V <sub>GS</sub> = 0V
t <sub>rr</sub>		620		ns	I <sub>SD</sub> = ±100mA

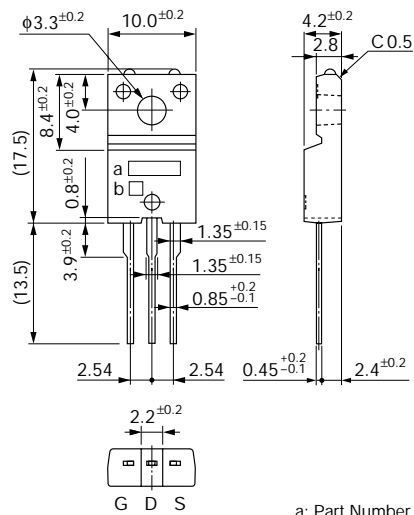
# External dimensions (Unit: mm)

## ① FM20 (TO-220F)

General product



UL approved product

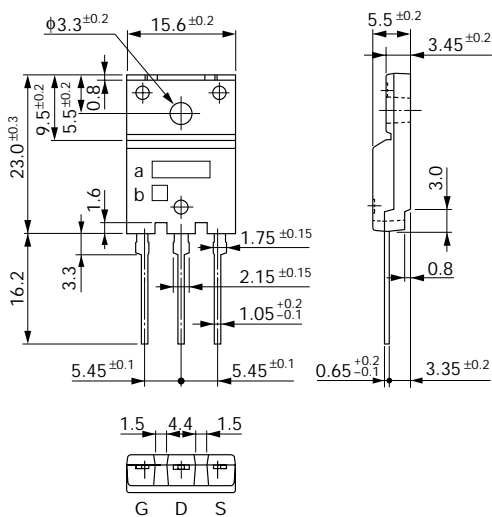


a: Part Number  
b: Lot Number

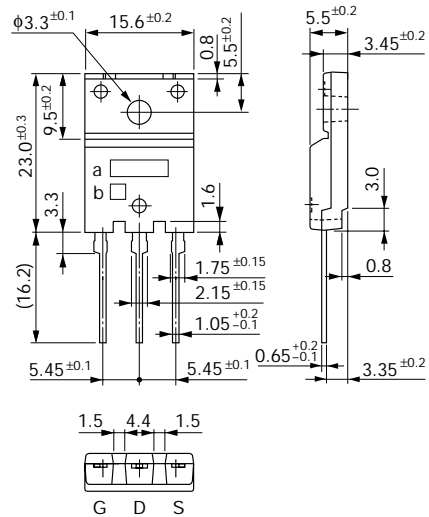
Weight: Approx 2.0g

## ② FM100 (TO-3PF)

General product



UL approved product



a: Part Number  
b: Lot Number

Weight: Approx 6.5g