

2SJ425

External dimensions 1 FM20

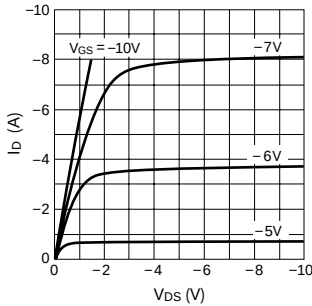
Absolute Maximum Ratings (Ta = 25°C)

Symbol	Ratings	Unit
V_{DSS}	-60	V
V_{GSS}	± 20	V
I_D	± 8	A
I_D (pulse)	± 32 ($T_{ch} \leq 150^\circ\text{C}$)	A
P_D	30 ($T_c = 25^\circ\text{C}$)	W
T_{ch}	150	$^\circ\text{C}$
T_{stg}	-55 to +150	$^\circ\text{C}$

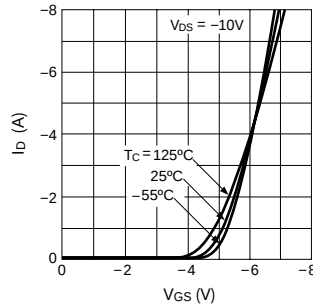
Electrical Characteristics (Ta = 25°C)

Symbol	Ratings			Unit	Conditions
	min	typ	max		
$V_{(BR) DSS}$	-60			V	$I_D = -250\mu\text{A}$, $V_{GS} = 0\text{V}$
I_{GSS}			± 500	nA	$V_{GS} = \pm 20\text{V}$
I_{DSS}			-250	μA	$V_{DS} = -60\text{V}$, $V_{GS} = 0\text{V}$
V_{TH}	-2.0		-4.0	V	$V_{DS} = -10\text{V}$, $I_D = -250\mu\text{A}$
$R_{e (yfs)}$	1.8	2.8		S	$V_{DS} = -10\text{V}$, $I_D = -4.0\text{A}$
$R_{DS(on)}$		0.2	0.28	Ω	$V_{GS} = -10\text{V}$, $I_D = -4.0\text{A}$
C_{iss}		580		pF	$V_{DS} = -25\text{V}$, $f = 1.0\text{MHz}$, $V_{GS} = 0\text{V}$
C_{oss}		360		pF	
t_{on}		90		ns	$I_D = -4.0\text{A}$, $V_{DD} = -30\text{V}$, $V_{GS} = -10\text{V}$, See Figure 3 on Page 5.
t_{off}		45		ns	

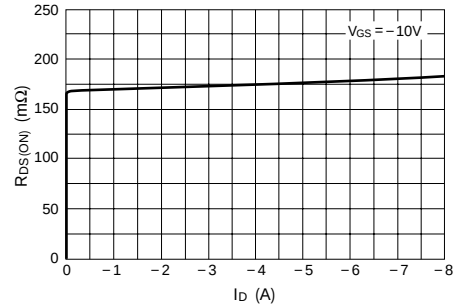
$I_D - V_{DS}$ Characteristics (typical)



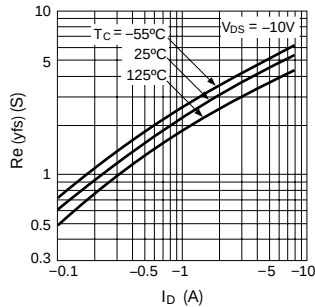
$I_D - V_{GS}$ Characteristics (typical)



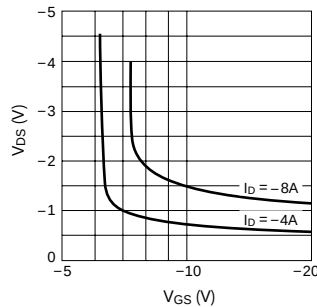
$R_{DS(ON)} - I_D$ Characteristics (typical)



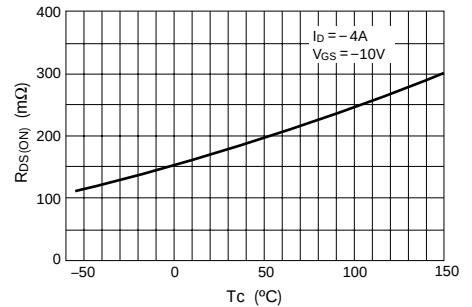
$R_{e (yfs)} - I_D$ Characteristics (typical)



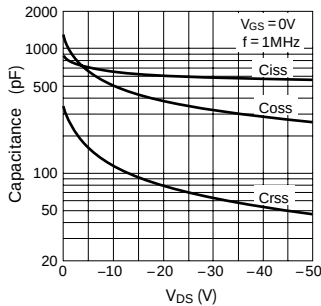
$V_{DS} - V_{GS}$ Characteristics (typical)



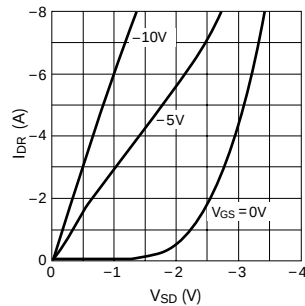
$R_{DS(ON)} - T_c$ Characteristics (typical)



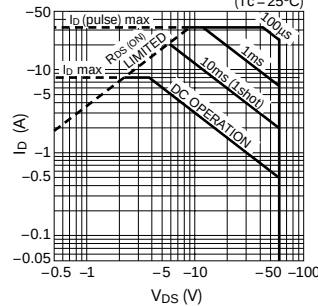
Capacitance - V_{DS} Characteristics (typical)



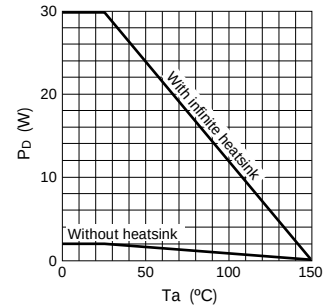
$I_{DR} - V_{SD}$ Characteristics (typical)



Safe Operating Area



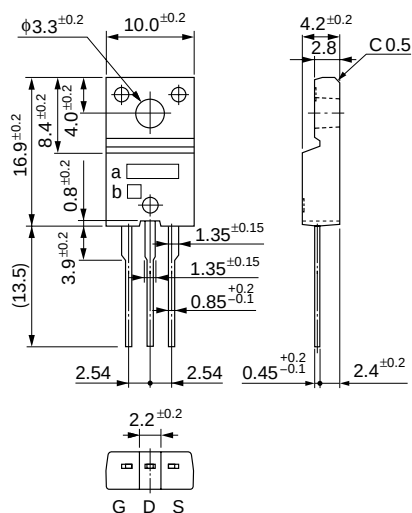
$P_D - T_a$ Characteristics



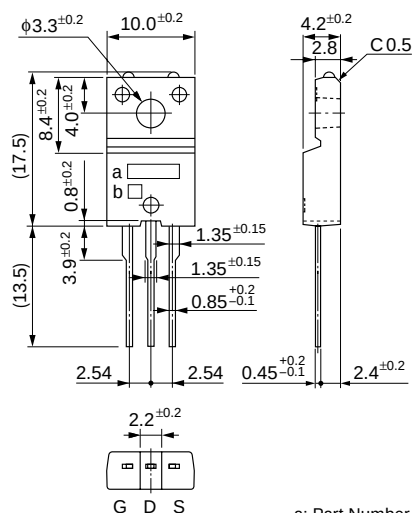
External dimensions (Unit: mm)

① FM20 (TO-220F)

General product



UL approved product

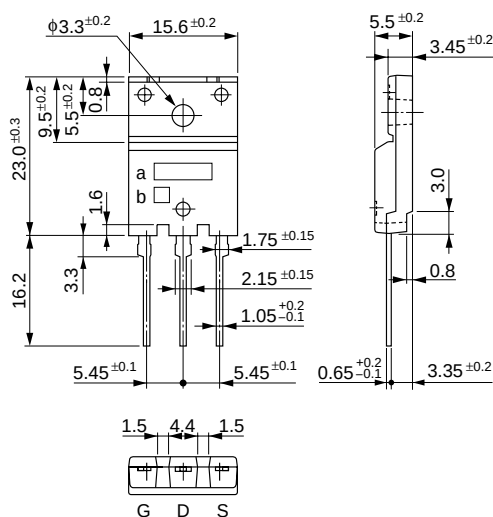


a: Part Number
b: Lot Number

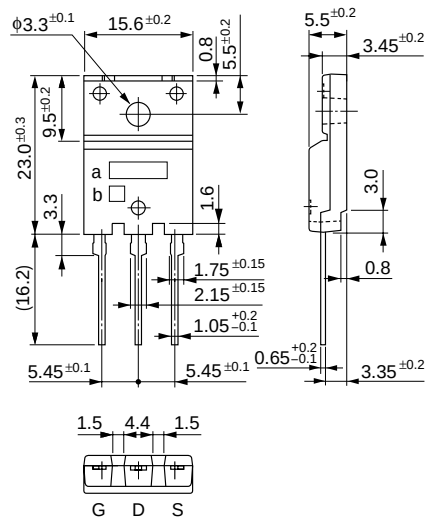
Weight: Approx 2.0g

② FM100 (TO-3PF)

General product



UL approved product



a: Part Number
b: Lot Number

Weight: Approx 6.5g