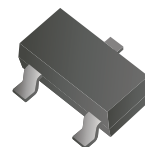
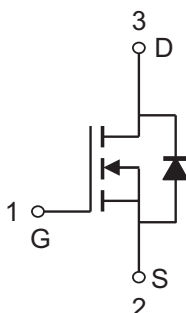


CJ3404-HF

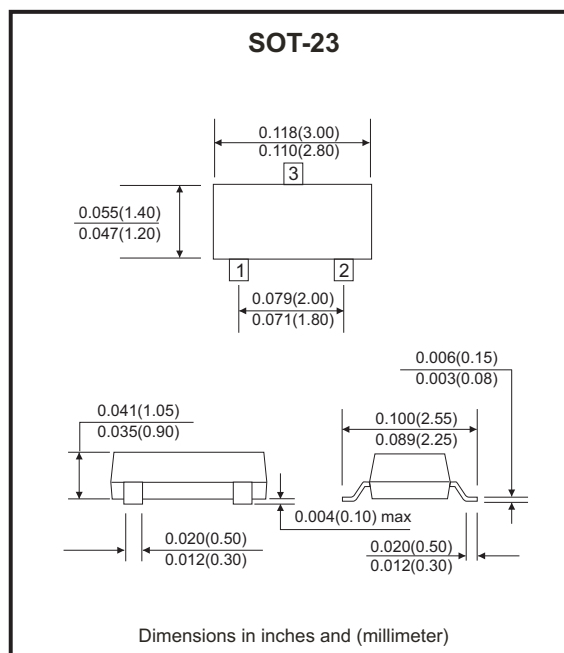
N-Channel
RoHS Device
Halogen Free



Circuit diagram



V _{(BR)DSS}	R _{DS(on)} MAX	I _D
30V	30mΩ @ 10V	5.8A
	42mΩ @ 4.5V	



Maximum Ratings and Electrical Characteristics

(at Ta=25 °C unless otherwise noted)

Parameter	Symbol	Value	Units
Drain-source voltage	V _{DS}	30	V
Gate-source voltage	V _{GS}	±20	V
Continuous drain current	I _D	5.8	A
Pulsed drain current (Note 1)	I _{DM}	30	A
Power dissipation	P _D	350	mW
Thermal resistance from Junction to ambient (t<5s)	R _{θJA}	357	°C/W
Junction temperature	T _J	150	°C
Storage temperature	T _{STG}	-55 to +150	°C

Note:

1. Repetitive rating: Pulse width limited by maximum junction temperature.

Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameters						
Drain-source breakdown voltage	V(BR) DSS	VGS=0V , ID=250μA	30			V
Zero gate voltage drain current	IDSS	VDS=30V , VGS=0V			1	μA
Gate-body leakage current	IGSS	VDS=0V , VGS=±20V			±100	nA
Gate threshold voltage	VGS(th)	VDS=VGS , ID=250μA	1	1.4	3	V
Drain-source on-resistance (Note 1)	RDS(on)	VGS=10V , ID=5.8A		23	30	mΩ
		VGS=4.5V , ID=4.8A		31	42	
Forward transconductance (Note 1)	gFS	VDS=5V , ID=5.8A	5			S
Diode forward voltage	VSD	IS = 1A			1	V
Dynamic Parameters (Note 2)						
Input capacitance	Ciss	VDS=15V , VGS=0V, f=1MHz			820	pF
Output capacitance	Coss			118		
Reverse transfer capacitance	Crss			85		
Gate resistance	Gg	VDS=0V , VGS=0V , f=1MHz			1.5	Ω
Switching Parameters (Note 2)						
Turn-on delay time	td(on)	VGS=10V , VDS=15V RL=2.6Ω , RGEN=3Ω			6.5	nS
Rise time	tr			3.1		
Turn-off delay time	td(off)			15.1		
Fall time	tf			2.7		

Note:

1. Pulse test: Pulse width≤300μs, Duty cycle≤0.5%.
2. These parameters have no way to verify.

RATING AND CHARACTERISTIC CURVES (CJ3404-HF)

Fig.1 - Output Characteristics

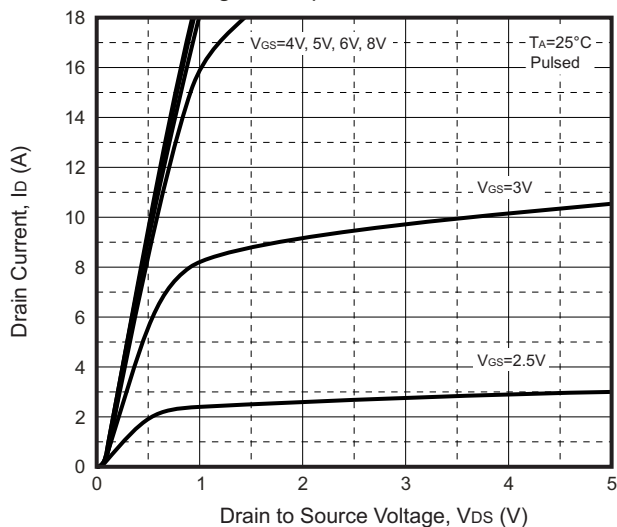


Fig.2 - Transfer Characteristics

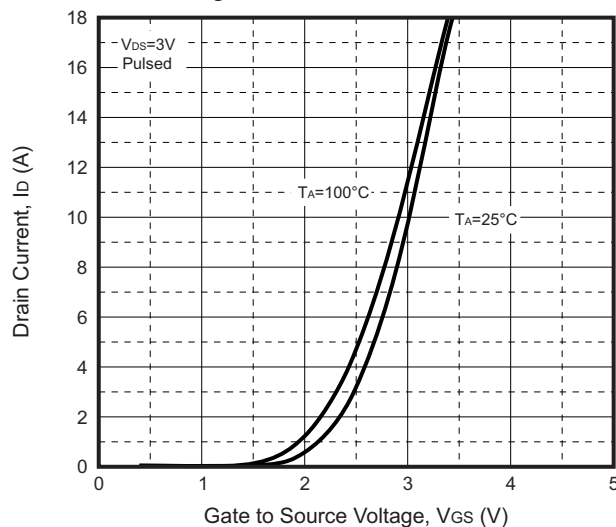


Fig.3 - $R_{DS(ON)}$ — I_D

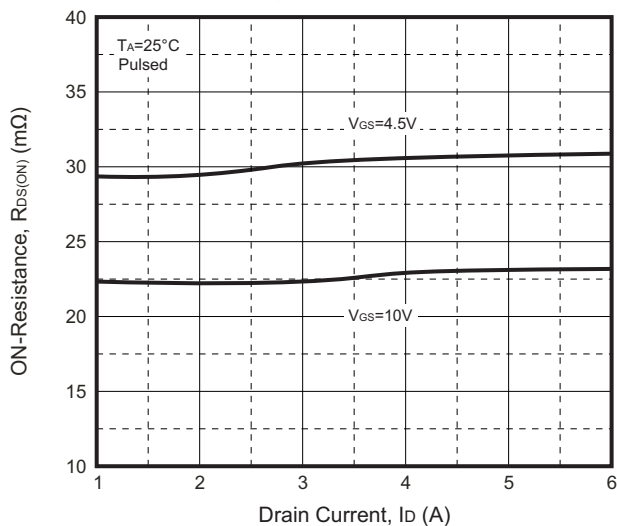


Fig.4 - $R_{DS(ON)}$ — V_{GS}

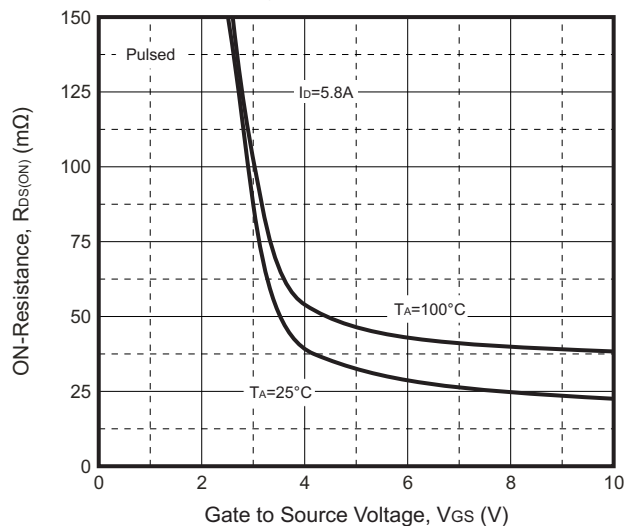


Fig.5 - I_S — V_{SD}

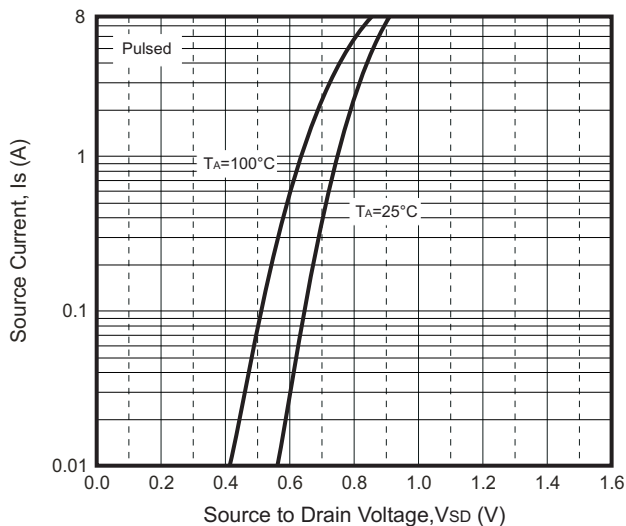
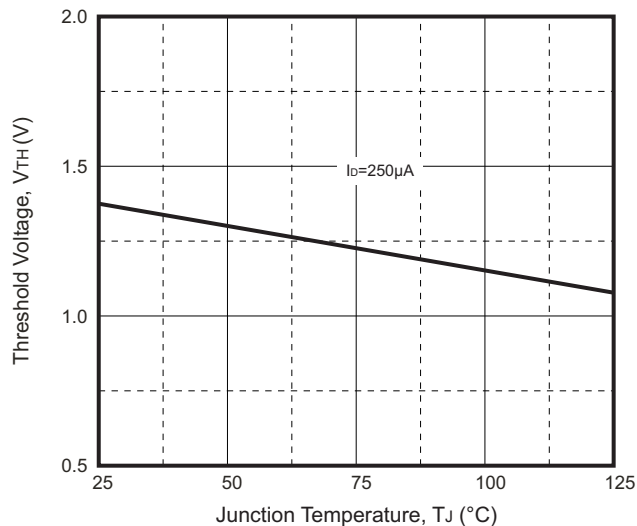


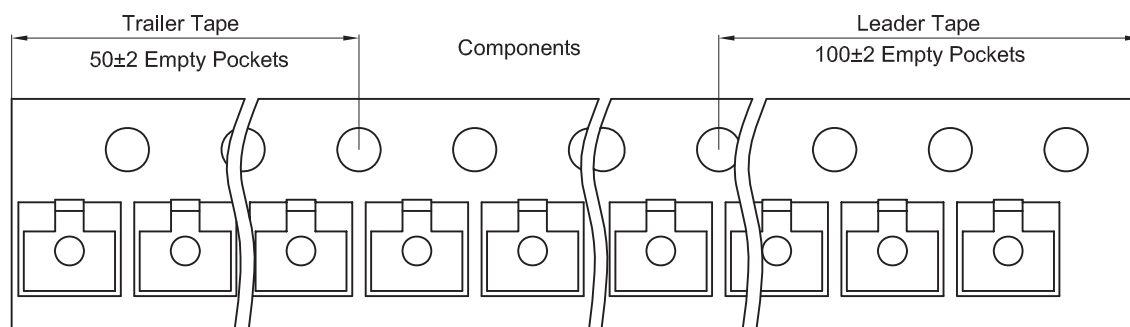
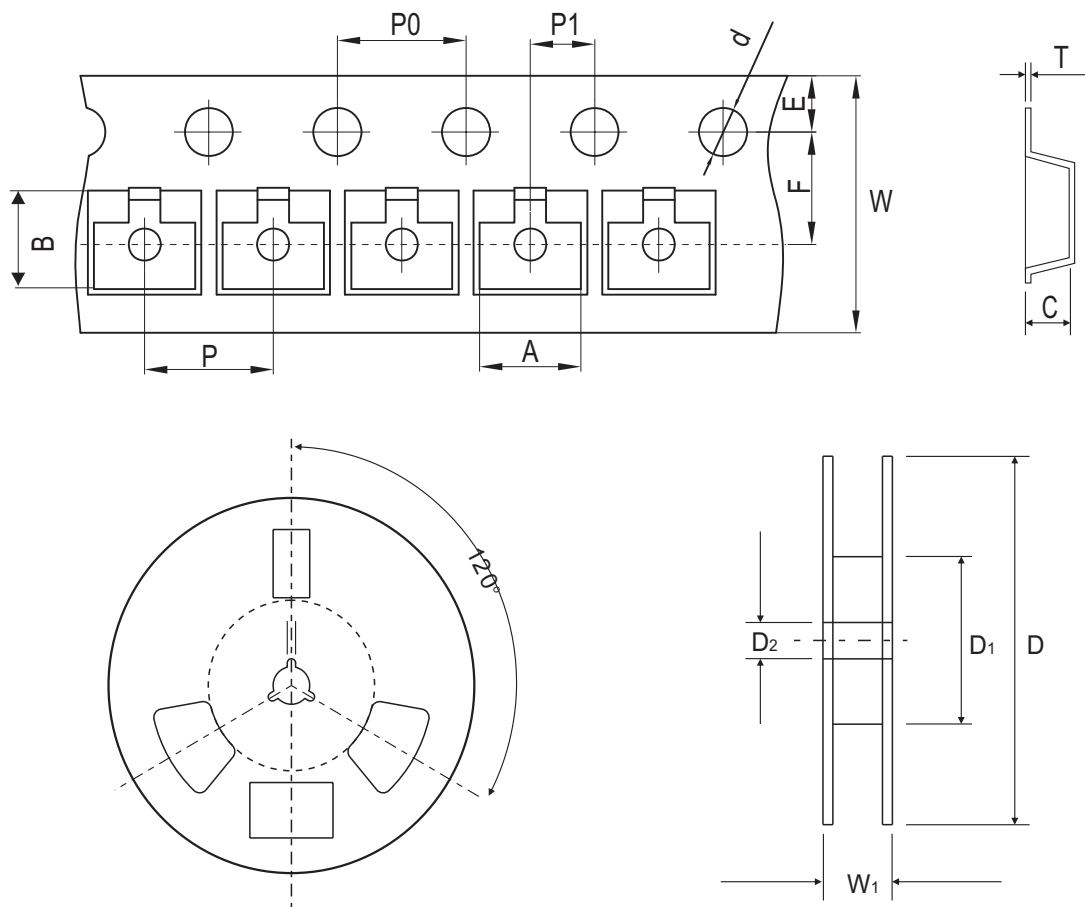
Fig.6 - Threshold Voltage



Company reserves the right to improve product design, functions and reliability without notice.

REV: C

Reel Taping Specification



SOT-23	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	3.15 ± 0.10	2.77 ± 0.10	1.22 ± 0.10	1.50 ± 0.10	178.00 ± 2.00	54.40 ± 1.00	13.00 ± 1.00
	(inch)	0.124 ± 0.004	0.109 ± 0.004	0.048 ± 0.004	0.059 ± 0.004	7.087 ± 0.079	2.142 ± 0.039	0.512 ± 0.039

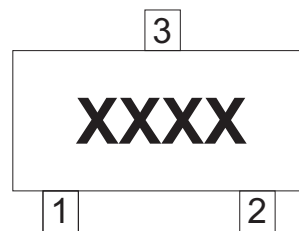
SOT-23	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	3.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	$8.00 + 0.30 / - 0.10$	12.30 ± 1.00
	(inch)	0.069 ± 0.004	0.138 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	$0.315 + 0.012 / - 0.004$	0.484 ± 0.039

Company reserves the right to improve product design , functions and reliability without notice.

REV: C

Marking Code

Part Number	Marking Code	
CJ3404-HF	R4	3404



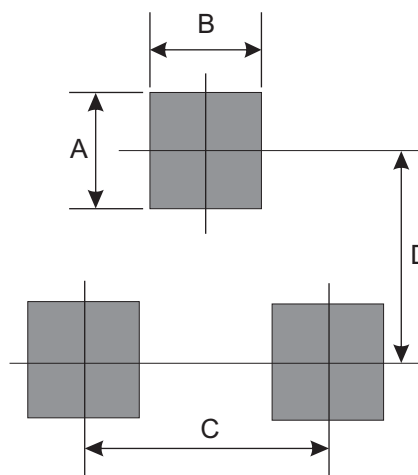
XX/XXXX = Product type marking code

Suggested PAD Layout

SIZE	SOT-23	
	(mm)	(inch)
A	0.80	0.031
B	0.60	0.024
C	1.90	0.075
D	2.02	0.080

Note:

- 1.General tolerance: $\pm 0.05\text{mm}$.
- 2.The pad layout is for reference purposes only.



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
SOT-23	3,000	7