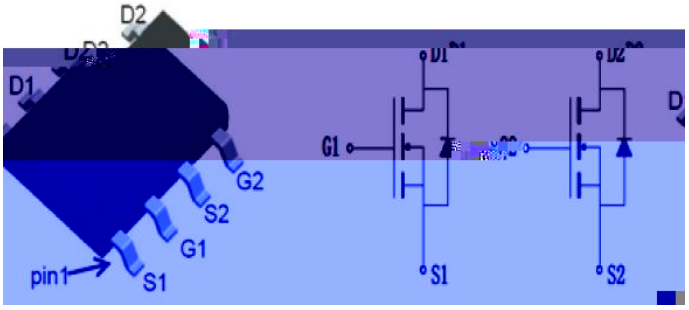
N-Channel Enhancement Mode Field Effect Transistor



Product Summary

- V_{DS} 30V
- I_D 8.5A
- $R_{DS(ON)}$(at V_{GS}=10V) 21mohm
- $R_{DS(ON)}$(at V_{GS}=4.5V) 35mohm
- 100% ∇V_{DS} Tested

General Description

- Trench Power LV MOSFET technology
- High density cell design for low $R_{DS(ON)}$
- High Speed switching

SOP-8

Applications

- Battery protection
- Load switch
- Power management

NOT RECOMMEND FOR NEW DESIGN

■ **Absolute Maximum Ratings** (T_A=25 unless otherwise noted)

Parameter		Symbol	Limit	Unit
Drain-source Voltage		V_{DS}	30	V
Gate-source Voltage		V_{GS}	± 20	V
Drain Current	T_A=25	I_D	8.5	A
	T_A=70		6.8	
Pulsed Drain Current [A]		I_{DM}	34	A
Total Power Dissipation	T_A=25	P_D	2.5	W
	T_A=70		1.6	W
Thermal Resistance Junction-to-Ambient [B]		$R_{\theta JA}$	50	/ W
Junction and Storage Temperature Range		T_J ,T_{STG}	-55 +150	

■ **Ordering Information** (Example)

PREFERED P/N	PACKING CODE	Marking	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YJS3404A	F2	Q3404.	4000	8000	64000	13“ reel

RECOMMEND
YJS3404B
FOR NEW DESIGN

Typical Performance Characteristics

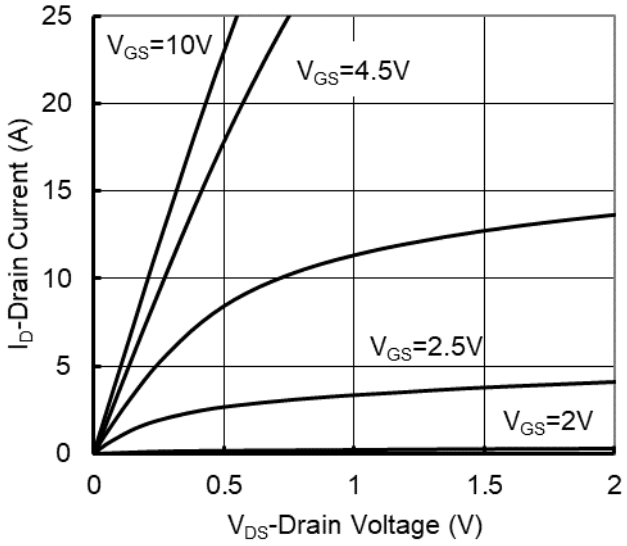


Figure1. Output Characteristics

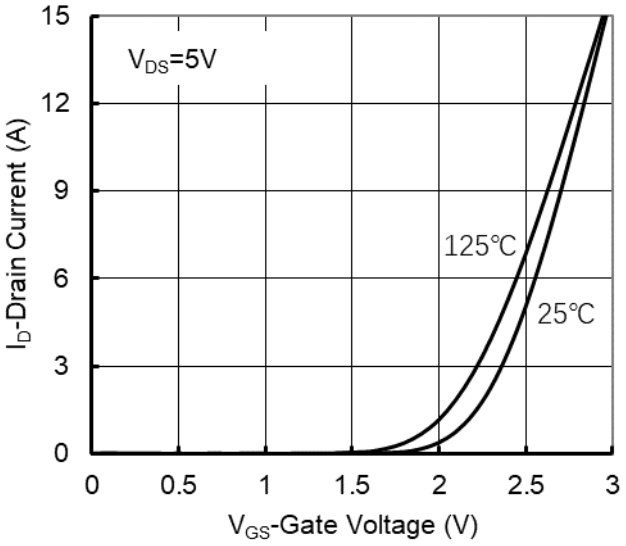


Figure2. Transfer Characteristics

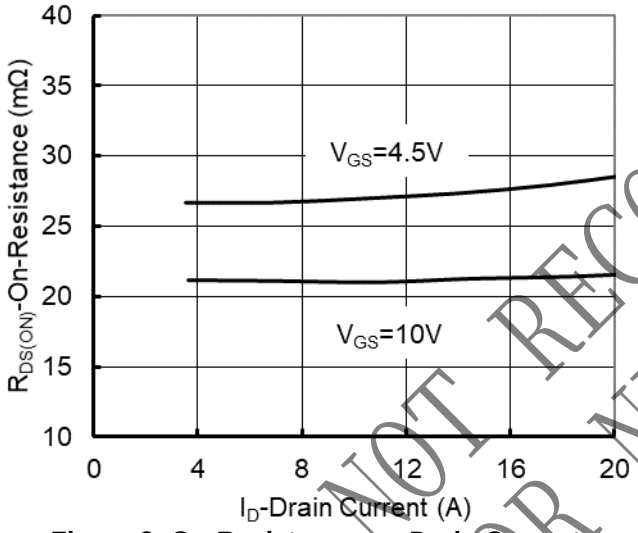


Figure 3: On-Resistance vs. Drain Current and Gate Voltage

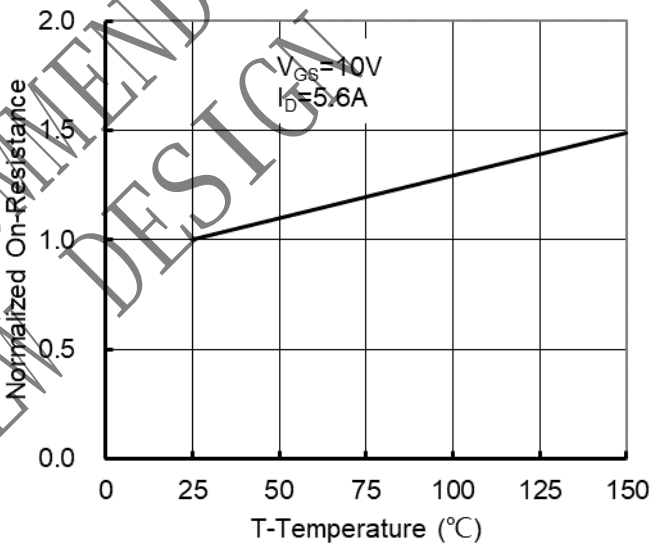


Figure 4: On-Resistance vs. Junction Temperature

NOT RECOMMEND FOR NEW DESIGN

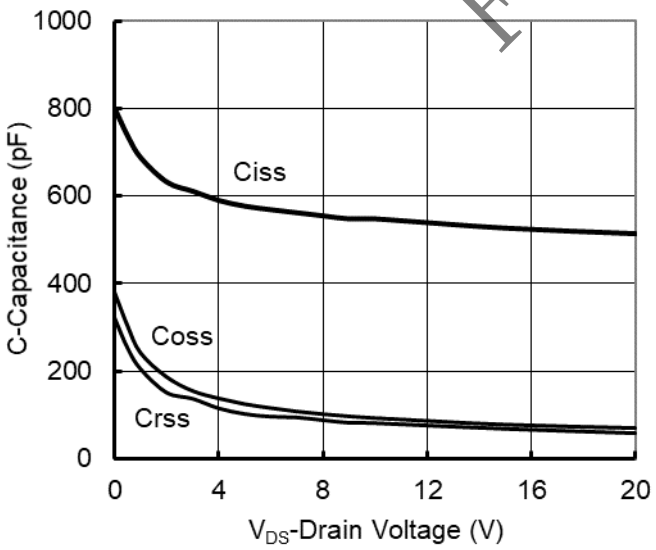


Figure5. Capacitance Characteristics

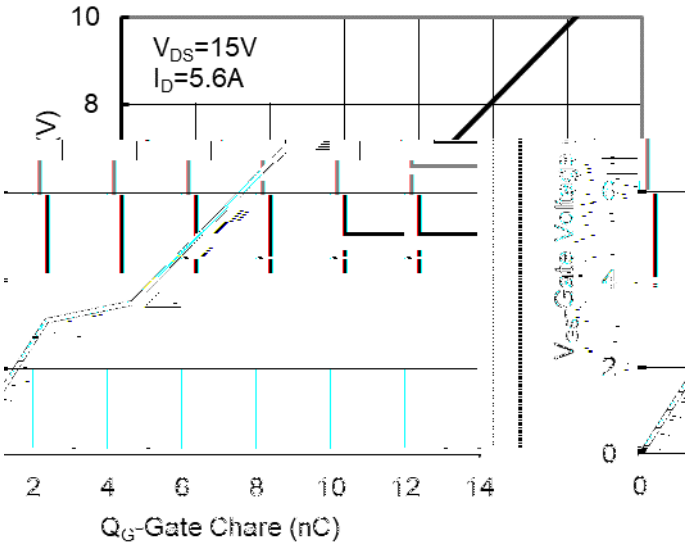


Figure6. Gate Charge

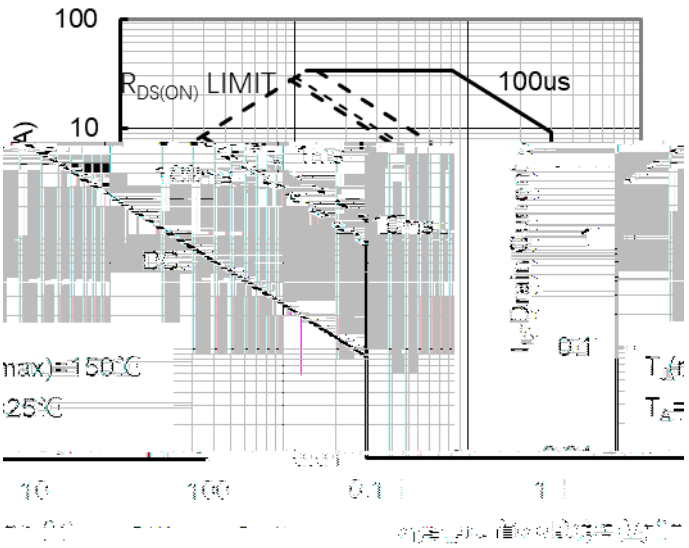


Figure7. Safe Operation Area

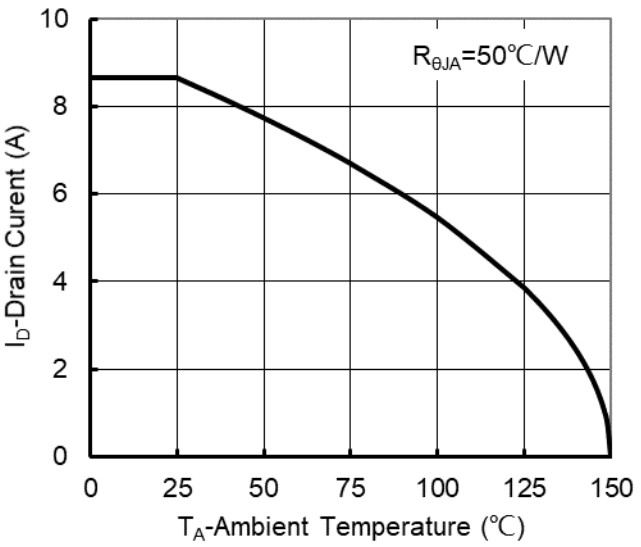


Figure8. Maximum Continuous Drain Current vs Ambient Temperature

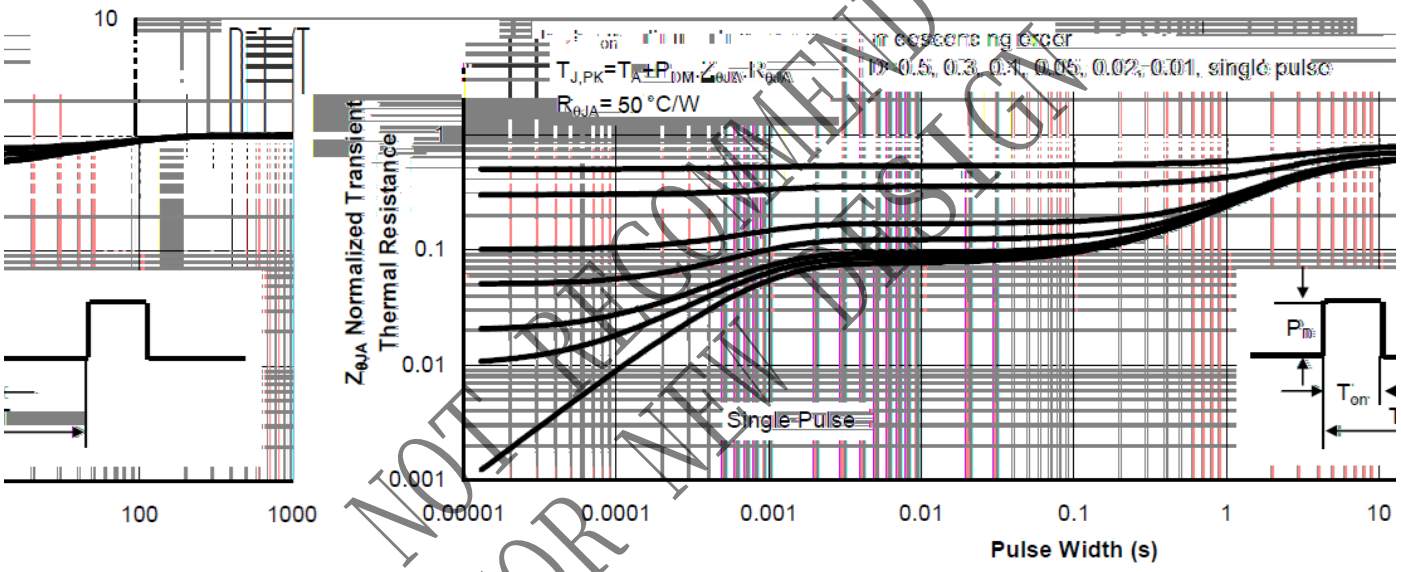
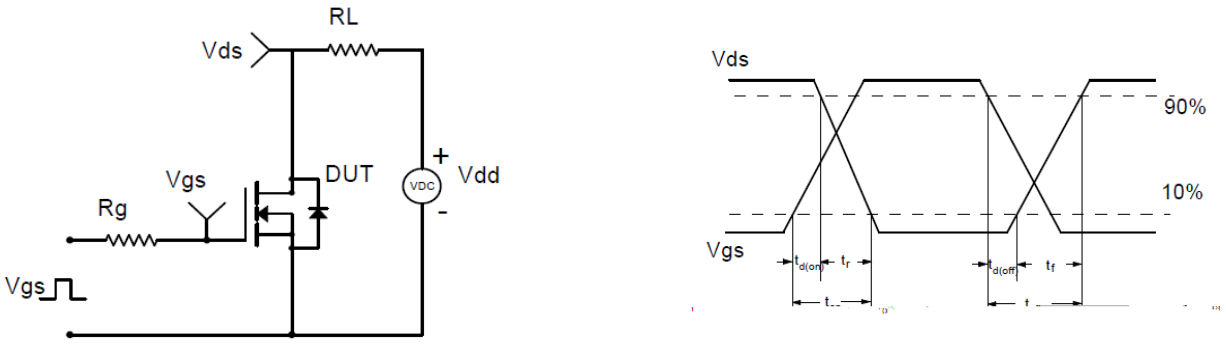
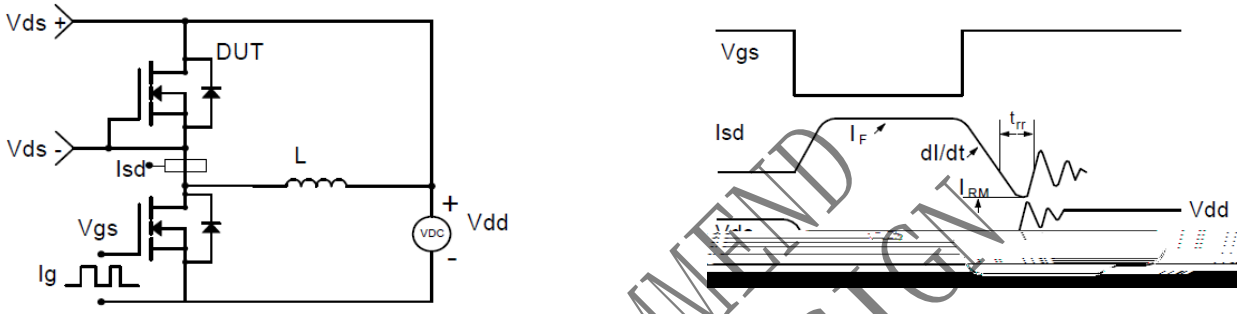


Figure9. Normalized Maximum Transient Thermal Impedance

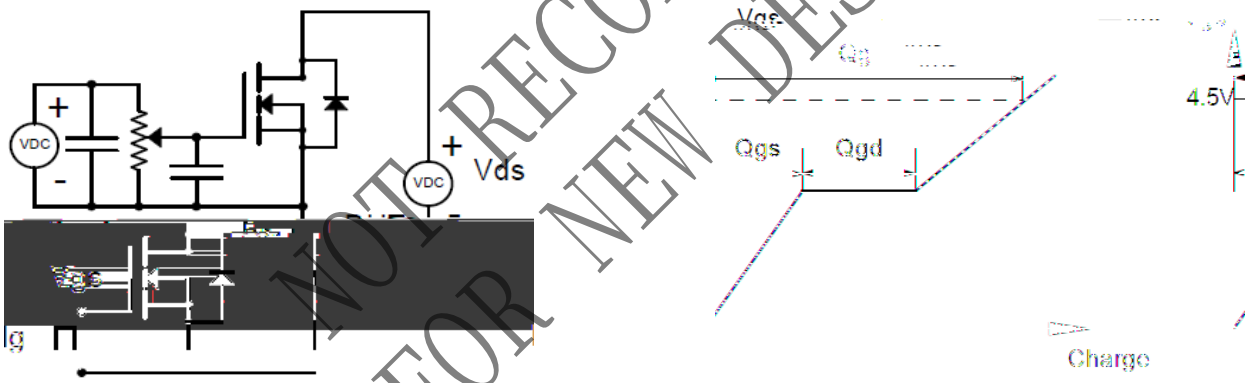
NOT RECOMMEND FOR NEW DESIGN



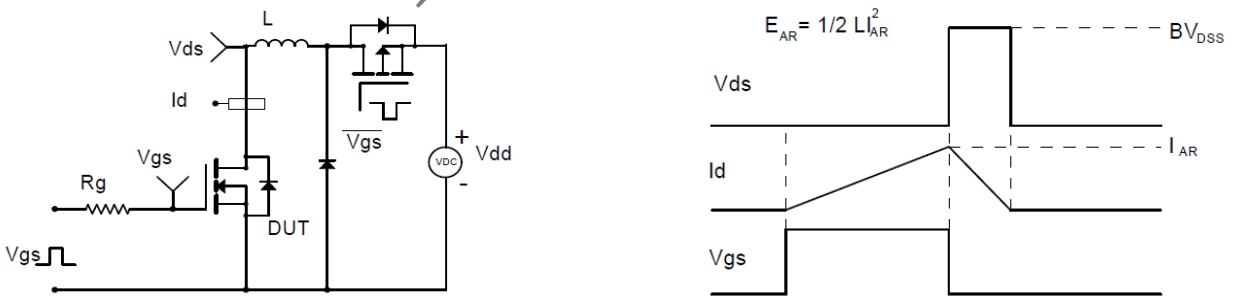
Resistive Switching Test Circuit & Waveforms



Diode Recovery Test Circuit & Waveforms



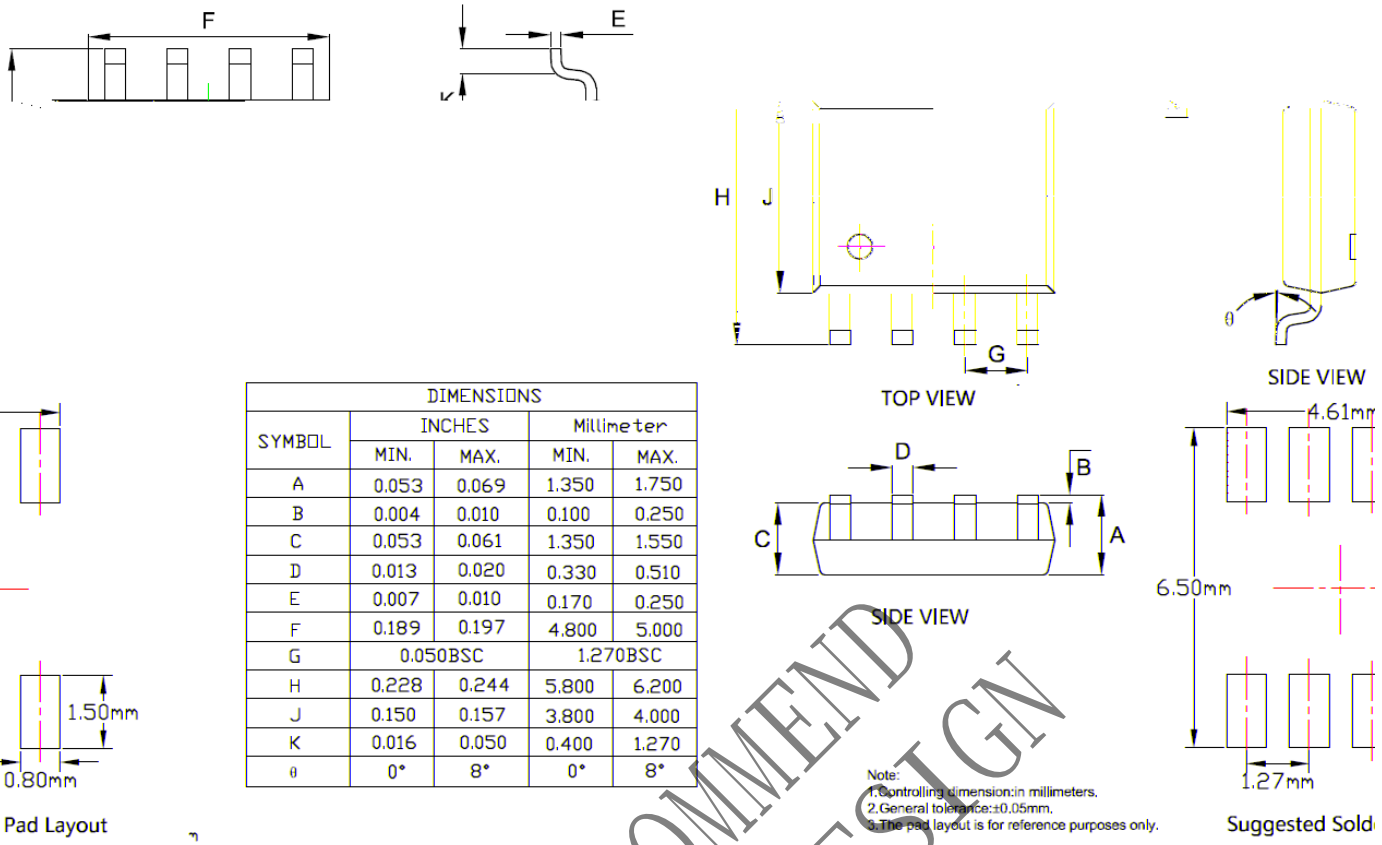
Gate Charge Test Circuit & Waveform



Unclamped Inductive Switching (UIS) Test Circuit & Waveforms

NOT RECOMMEND FOR NEW DESIGN

■ SOP-8 Package information



DIMENSIONS				
SYMBOL	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.053	0.069	1.350	1.750
B	0.004	0.010	0.100	0.250
C	0.053	0.061	1.350	1.550
D	0.013	0.020	0.330	0.510
E	0.007	0.010	0.170	0.250
F	0.189	0.197	4.800	5.000
G	0.050BSC		1.270BSC	
H	0.228	0.244	5.800	6.200
J	0.150	0.157	3.800	4.000
K	0.016	0.050	0.400	1.270
θ	0°	8°	0°	8°

Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.

NOT RECOMMEND FOR NEW DESIGN

Disclaimer