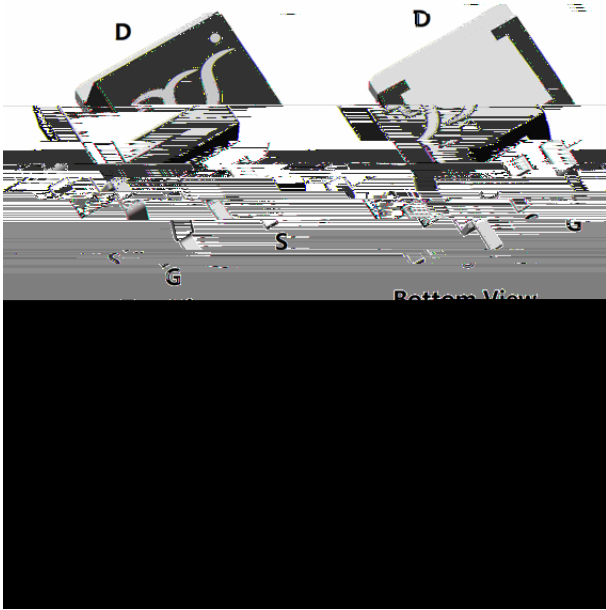




N-Channel Enhancement Mode Field Effect Transistor



Product Summary

✓ V_{DS}	60V
✓ I_D	95A
✓ $R_{DS(ON)}$ (at $V_{GS}=10V$)	5.2mohm
✓ 100% EAS Tested	
✓ 100% VDS Tested	

General Description

- ✓ Excellent package for heat dissipation
- ✓ High density cell design for low $R_{DS(ON)}$
- ✓ Moisture Sensitivity Level 1
- ✓ Epoxy Meets UL 94 V-0 Flammability Rating
- ✓ Halogen Free
- ✓ Part no. with suffix 'Q' means AEC-Q101 qualified

Applications

- ✓ Power switching application
- ✓ Uninterruptible power supply
- ✓ DC-DC convertor
- ✓ 12V Automotive systems

Ω Absolute Maximum Ratings ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter		Symbol	Limit	Unit
Drain-source Voltage		V_{DS}	60	V
Gate-source Voltage		V_{GS}	±20	V
Drain Current	$T_A=25^\circ\text{C}$	I_D	14	A
	$T_A=100^\circ\text{C}$		10	
	$T_C=25^\circ\text{C}$		95	
	$T_C=100^\circ\text{C}$		70	
Pulsed Drain Current ^A		I_{DM}	380	A
Avalanche energy ^B		EAS	72	mJ

Junction and Storage Temperature Range	T_J, T_{STG}	-55 +175	-
--	----------------	----------	---

Ω Thermal resistance

Parameter		Symbol	Typ	Max	Units
Thermal Resistance Junction-to-Ambient ^D	Steady-State	$R_{\theta JA}$	35	45	- /W
Thermal Resistance Junction-to-Case	Steady-State	$R_{\theta JC}$	1.2	1.5	

Ω Ordering Information (Example)

PREFERRED P/N	PACKING CODE	Marking		QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YJB95G06AQ	F2	YJB95G06A	800	/	8000	13" reel



YJB95G06AQ

Ω Electrical Characteristics (T_J=25℃ unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						
Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} = 0V, I _D =250mA	60			V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =60V, V _{GS} =0V			1	mA
Gate-Body Leakage Current	I _{gss}	V _{GS} =0V, V _{DS} =60V				100

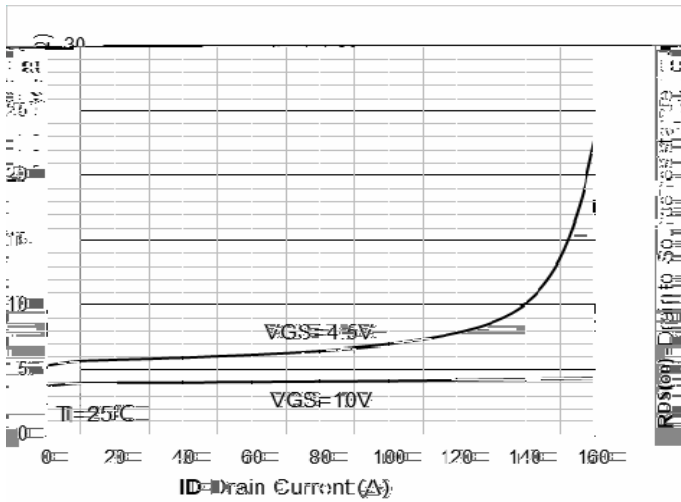


Figure7. $R_{DS(on)}$ VS Drain Current

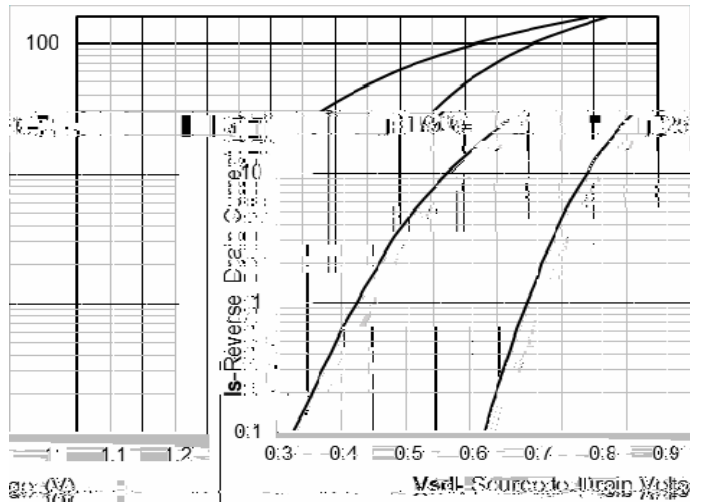


Figure8. Forward characteristics of reverse diode

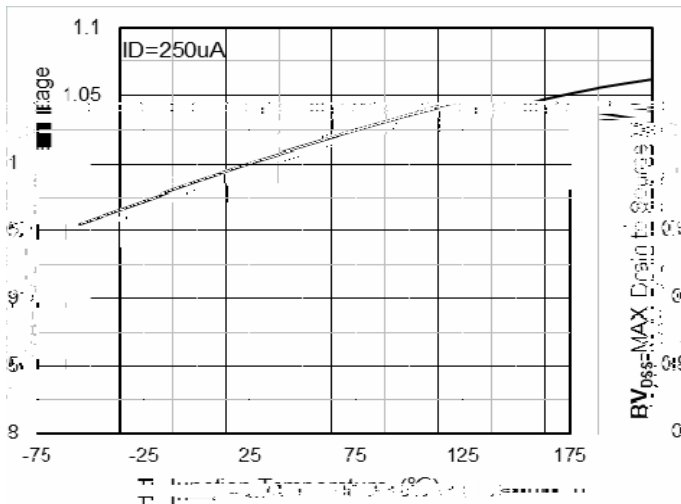


Figure9. Normalized breakdown voltage

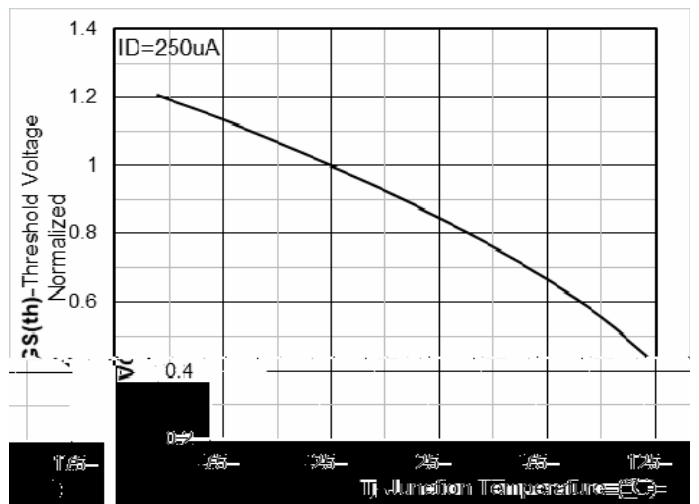


Figure10. Normalized Threshold voltage

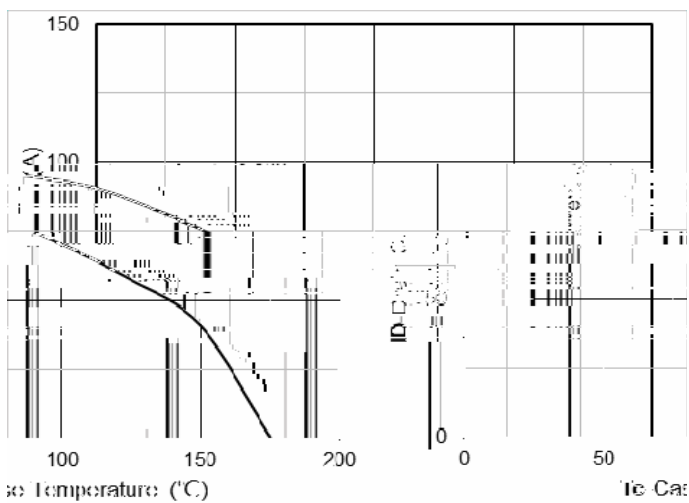


Figure11. Current dissipation

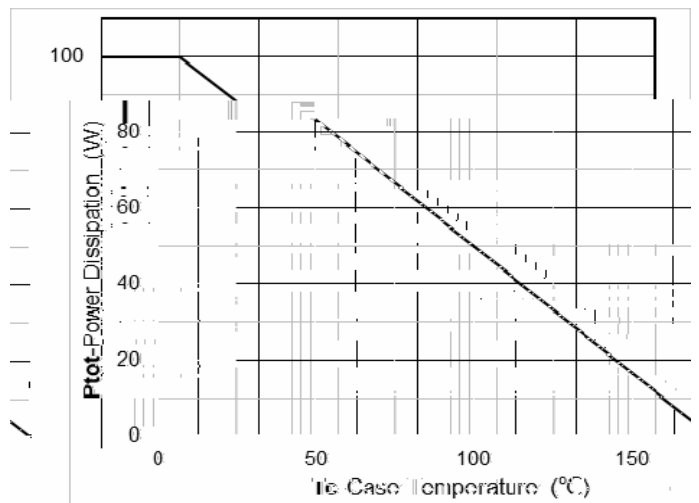


Figure12. Power dissipation

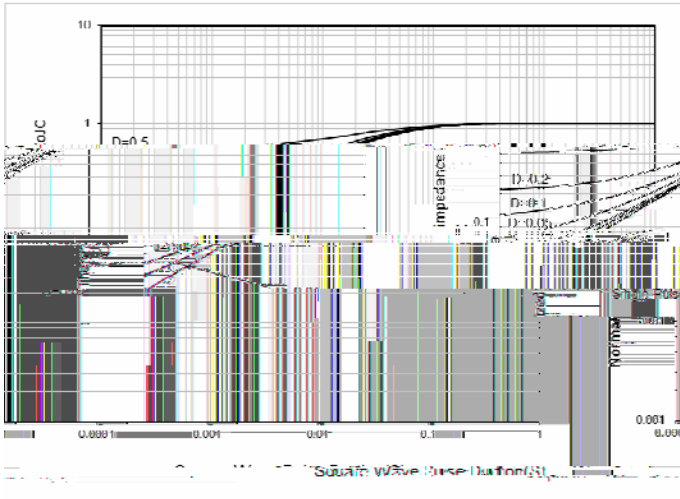


Figure13. Maximum Transient Thermal Impedance

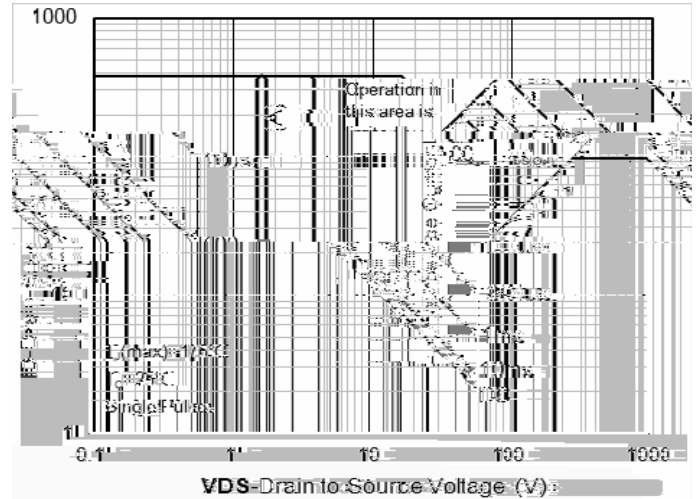


Figure14. Safe Operation Area



SYMBOL	MIN.	
	0.000	
A2	0.174	0.180
		0.032
b2		0.050
c		
c2		
D2		
E		
E1		



Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with automotive electronics are not designed for use in medical, life-saving, lifesustaining, or military, Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <http://www.21yangjie.com> , or consult your nearest Yangjie's sales office for further assistance.