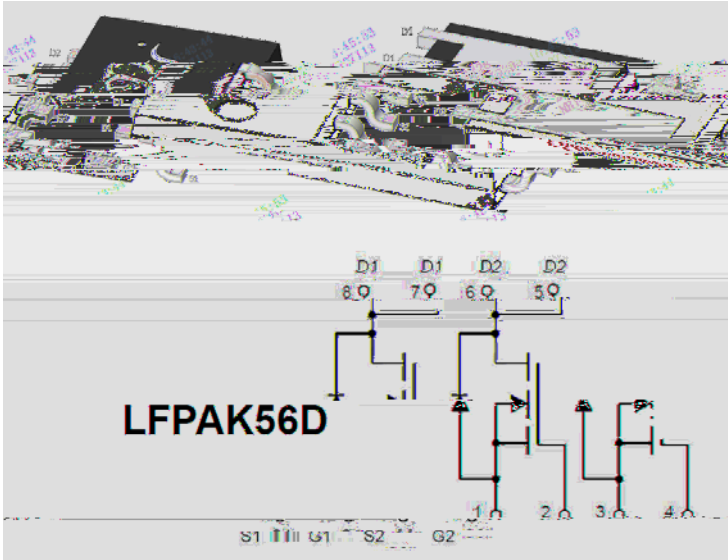




N-Channel Enhancement Mode Field Effect Transistor



Product Summary

Ŕ V _{DS}	40V
Ŕ I _D	69A
Ŕ R _{DS(ON)} (at V _{GS} =10V)	5.8mq
	mbol

				Limit	Unit
Drain-source Voltage			V _{DS}	40	V
Gate-source Voltage			V _{GS}	±20	V
Continuous Drain Current (Note 1,2)	Steady-State	T _A =25 ™ , V _{GS} = 10V	I _D	14	A
		T _A =100 ™ , V _{GS} = 10V		10	
Continuous Drain Current (Note 1,3)	Steady-State	T _C =25 ™ , V _{GS} = 10V		69	
		T _C =100 ™ , V _{GS} = 10V		48	
Pulsed Drain Current	T _C =25 ™ , t _s =1000s		I _{DM}	270	A
Avalanche energy	V _G =10V, R _G =25q, L=0.5mH, IAS=16A		EAS	64	mJ
Total Power Dissipation (Note 1,2)	Steady-State	T _A =25 ™ 3			
			P _D		W
		c=25 ™		65	
		T _C =100 ™		32	
Junction and Storage Temperature Range			T _J ,T _{STG}	-55 +175	™

Thermal resistance

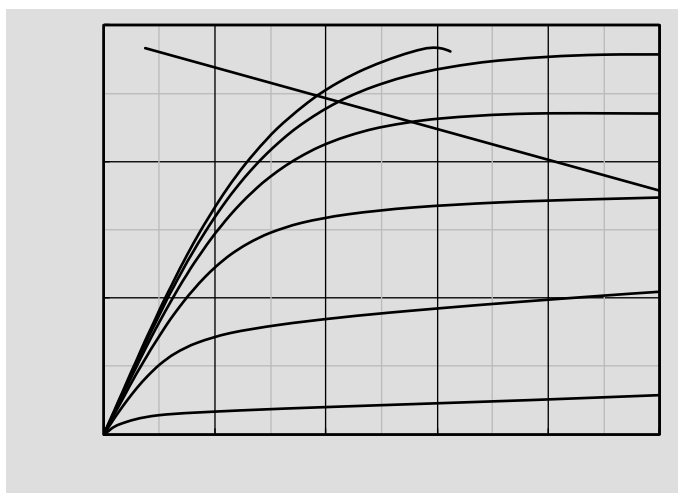
Parameter		Symbol	Typ	Max	Units
Thermal Resistance Junction-to-Ambient (Note 2)	Steady-State	R _{dJA}	40	50	† /W
Thermal Resistance Junction-to-Case	Steady-State	R _{dJC}	1.8	2.3	

Ordering Information (Example)

PREFERED P/N	PACKING CODE	Marking	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YJYAD5D8G04HRHQ	F1	YAD5D8G04HR	5000	10000	100000	13Ŕ reel



■ Typical Electrical and Thermal Characteristics Diagrams



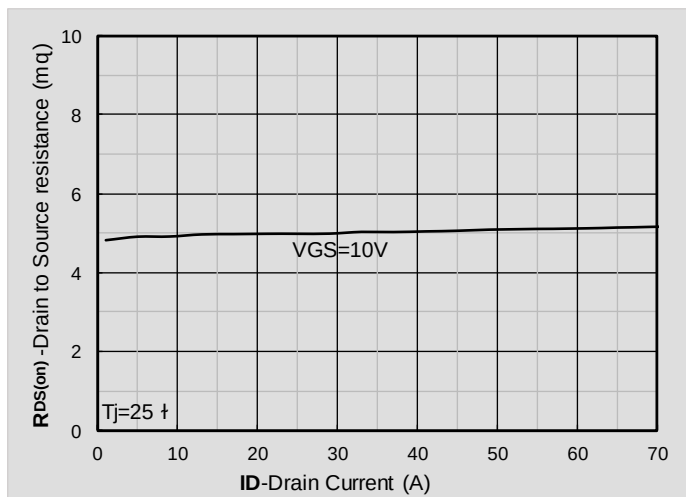


Figure 7. $R_{DS(on)}$ VS Drain Current

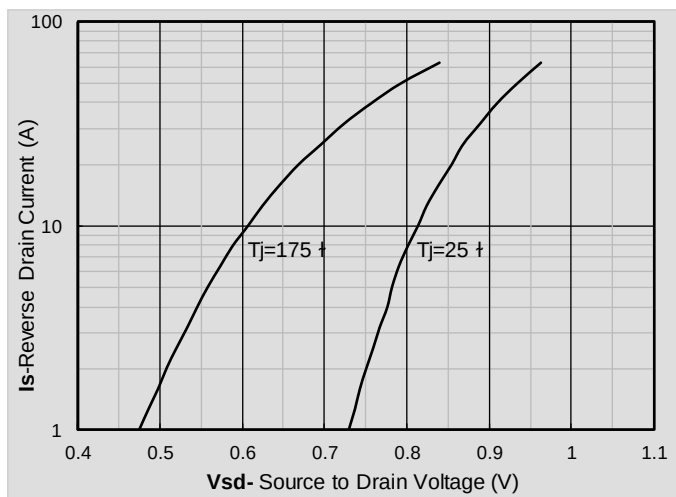


Figure 8. Forward characteristics of reverse diode

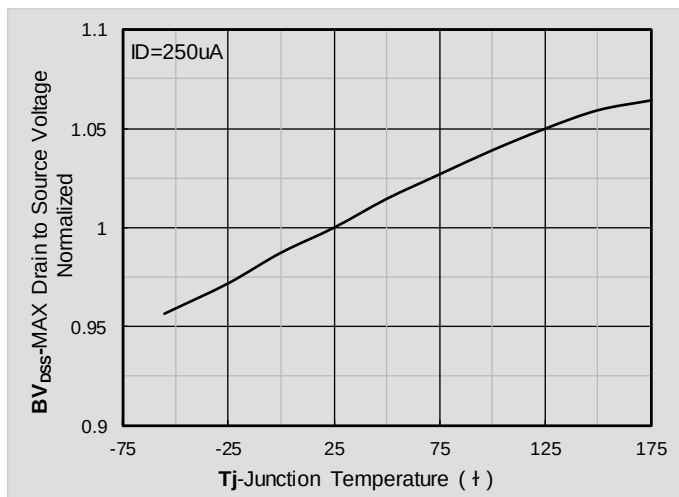


Figure 9. Normalized breakdown voltage

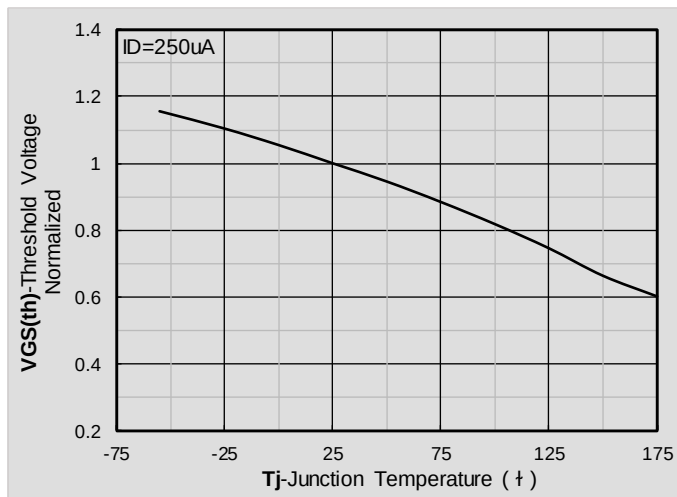


Figure 10. Normalized Threshold voltage

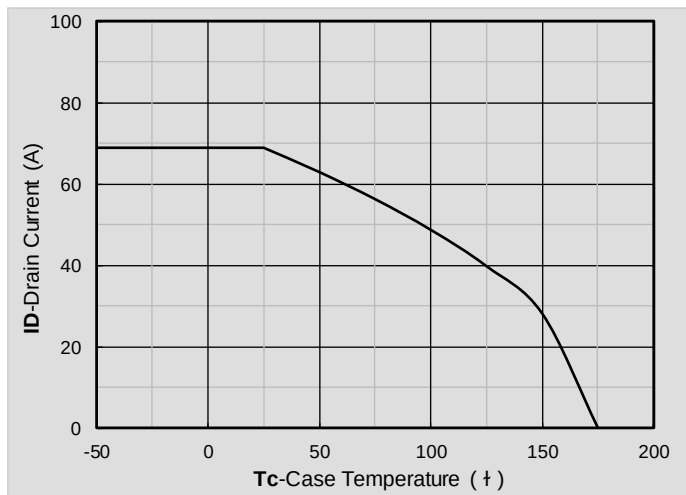


Figure 11. Current dissipation

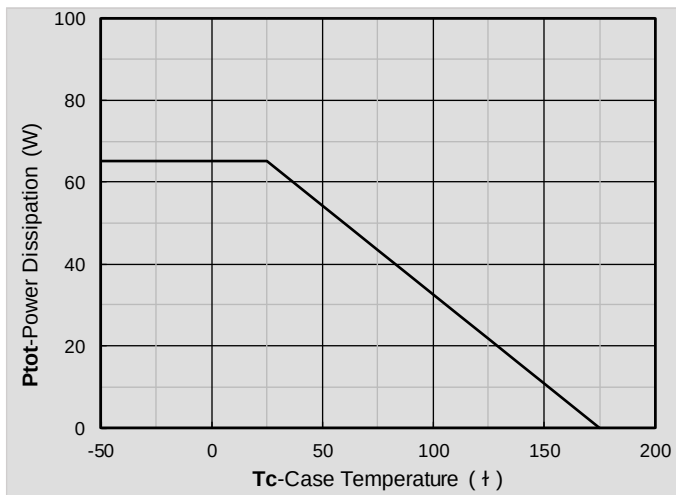
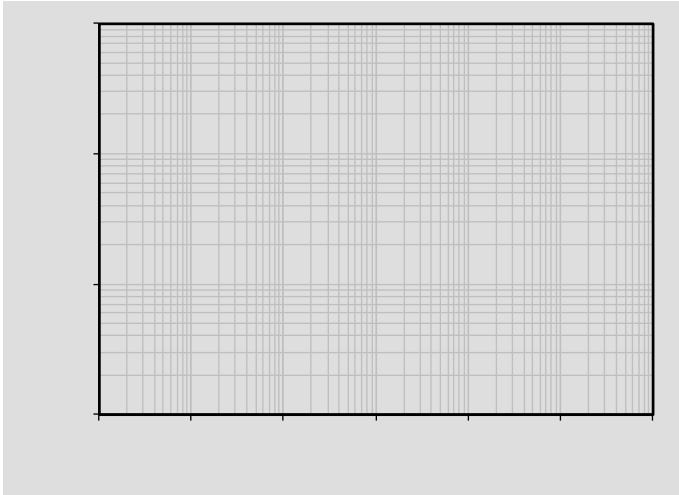
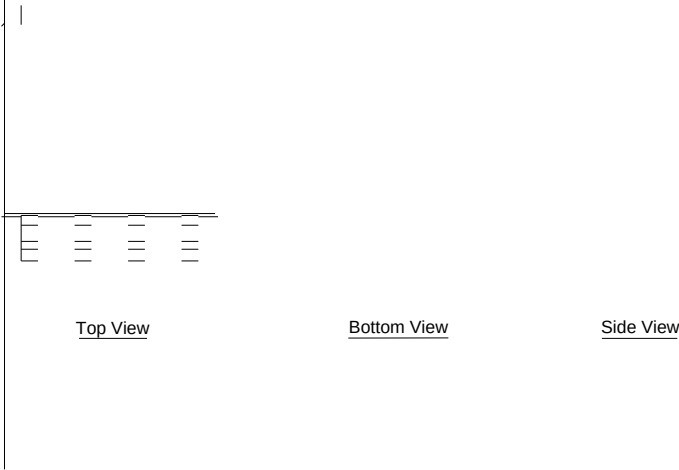


Figure 12. Power dissipation





y LFPAK56D Package information



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.10mm.
3.The pad layout is for reference purposes only.
4. It is the key size.



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