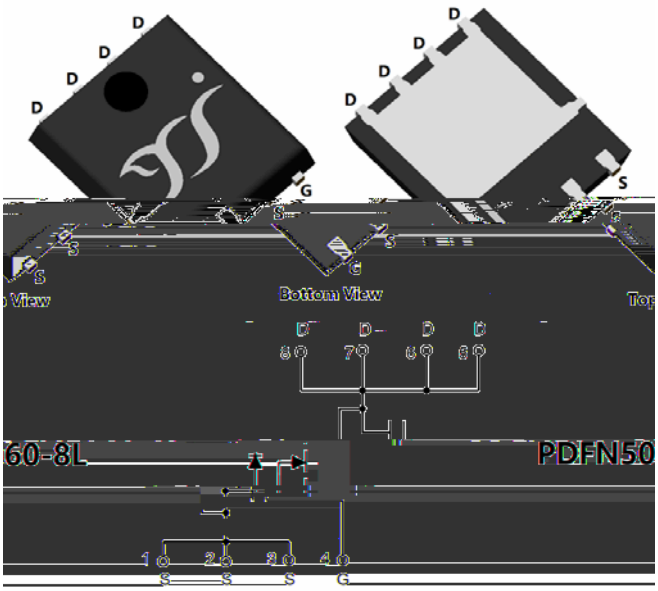
RoHS
COMPLIANT



- V_{DS} 60V
- I_D 20A
- $R_{DS(ON)}$(at V_{GS}=10V) 32mΩ
- $R_{DS(ON)}$(at V_{GS}=4.5V) 55mΩ
- 100% EAS Tested
- 100% V_{DS} Tested

- Excellent package for heat dissipation
- High density cell design for low $R_{DS(ON)}$
- Moisture Sensitivity Level 1
- Part no. with suffix "Q" means AEC-Q101 qualified

- Power switching application
- Uninterruptible power supply
- DC-DC convertor
- 12V and 24V Automotive systems

■ (T_A=25 unless otherwise noted)

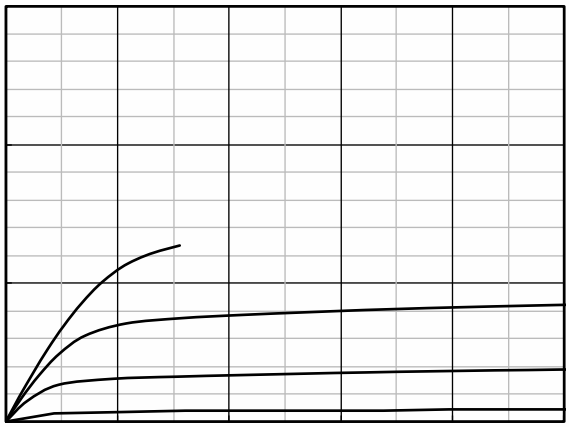
Drain-source Voltage		V_{DS}	60	V
Gate-source Voltage		V_{GS}	±20	V
Drain Current	T_A=25	I_D	4.4	A
	T_A =100		3.1	
	T_C=25		20	
	T_C =100		14	
Pulsed Drain Current [A]		I_{DM}	80	A
Avalanche energy [B]		EAS	36	mJ
Total Power Dissipation [C]	T_A=25	P_D	2.5	W
	T_A =100		1.25	
	T_C=25		83	
	T_C =100		41	
Thermal Resistance Junction-to-Ambient [D]		$R_{\theta JA}$	60	/W
Thermal Resistance Junction-to-Case		$R_{\theta JC}$	1.8	/W
Junction and Storage Temperature Range		T_J ,T_{STG}	-55 +175	

■ (Example)

YJG20N06AHQ	F1	YJG20N06AH	5000	10000	100000	13" reel

■ (T_J=25 unless otherwise noted)

Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}= 0V, I_D=250μA	60			V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=60V, V_{GS}=0V			1	μA
Gate-Body Leakage Current	I_{GSS}	V_{GS}=±20V, V_{DS}=0V			±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}= V_{GS}, I_D=250μA	1.5	2	2.5	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=10V, I_D=20A		24	32	mΩ
		V_{GS}=4.5V, I_D				



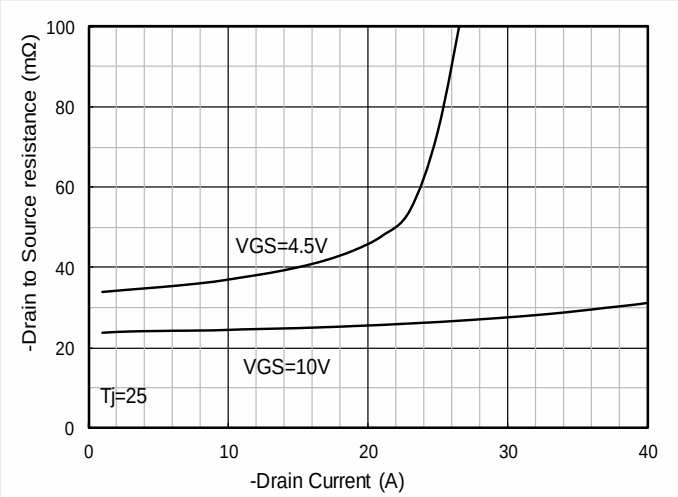


Figure 7. $R_{DS(on)}$ VS Drain Current

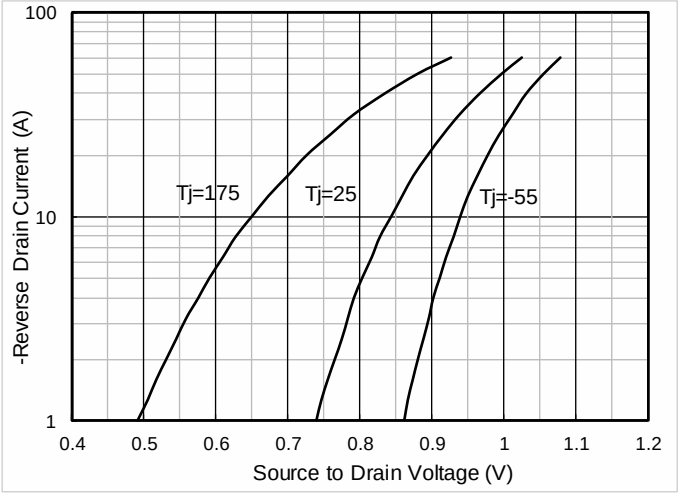


Figure 8. Forward characteristics of reverse diode

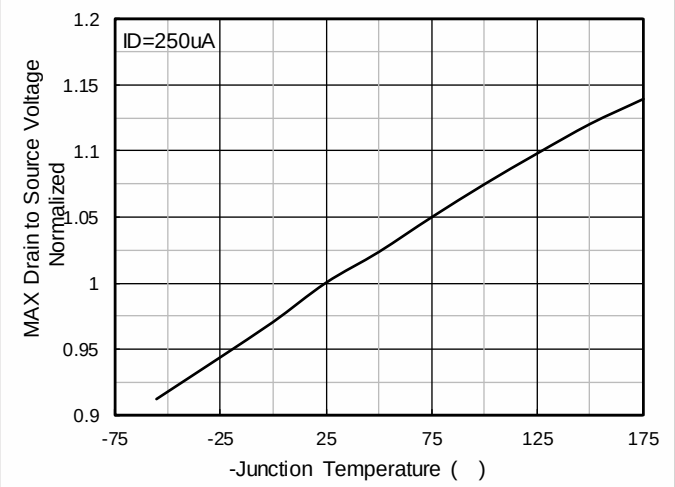


Figure 9. Normalized breakdown voltage

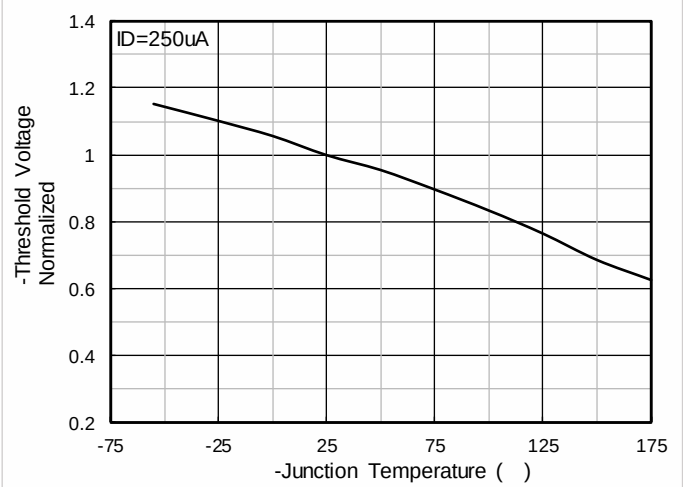


Figure 10. Normalized Threshold voltage

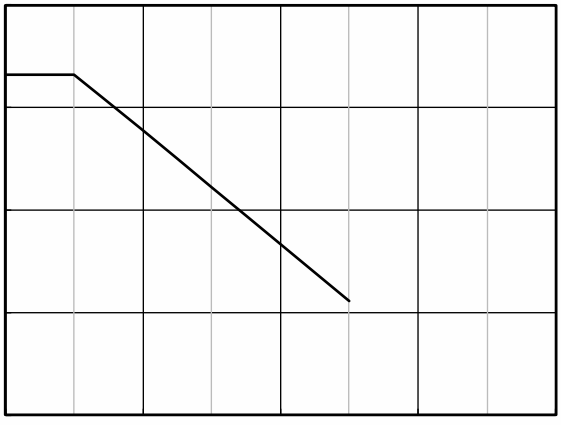
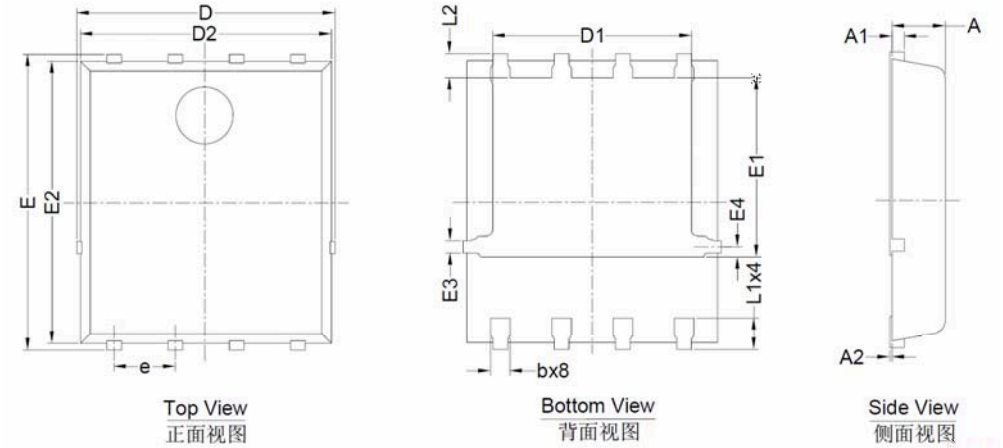


Figure 11. Current dissipation

Figure 12. Power dissipation

■



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
D	5.15	5.35	5.55
E	5.95	6.15	6.35
A	1.00	1.10	1.20
A1		0.254 BSC	
A2			0.10
D2	5.00	5.20	5.40
E2	5.66	5.86	6.06
E3		0.254 REF	
E4		0.21 REF	

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