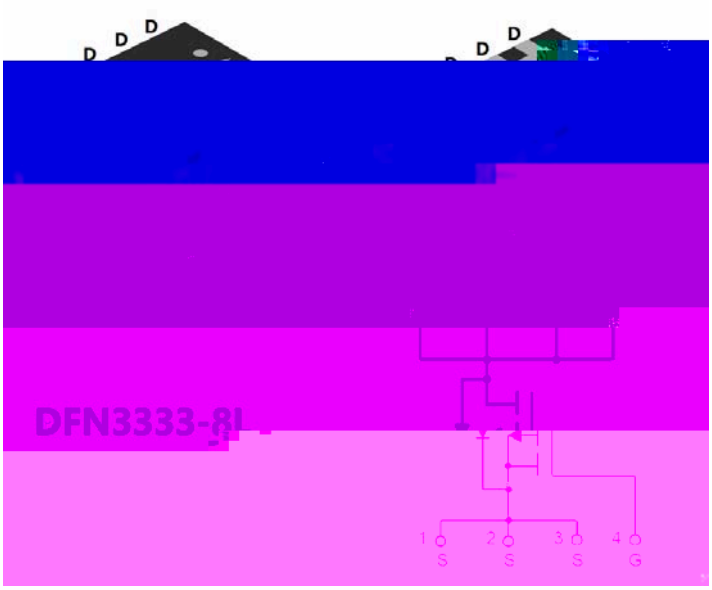
RoHS
COMPLIANT



- V_{DS} -100V
- I_D -15A
- $R_{DS(ON)}$(at V_{GS}=10V) 110mΩ
- $R_{DS(ON)}$(at V_{GS}=4.5V) 120mΩ
- 100% EAS Tested

- Split gate trench MOSFET technology
- Excellent package for heat dissipation
- High density cell design for low $R_{DS(ON)}$
- Part no. with suffix "Q" means AEC-Q101 qualified

- Power switching application
- Uninterruptible power supply
- DC-DC convertor
- 12V, 24V and 48V Automotive systems

■ (T_A=25 unless otherwise noted)

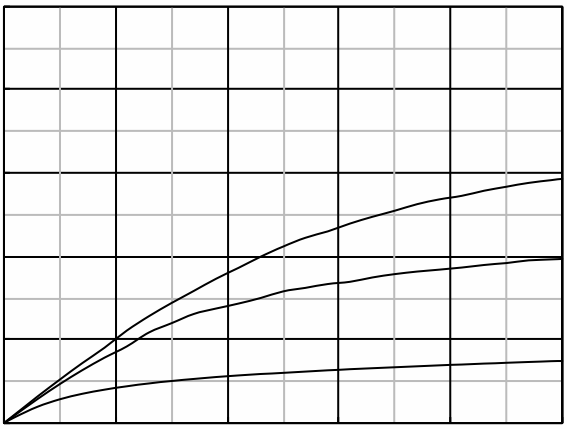
Drain-source Voltage		V_{DS}	-100	V
Gate-source Voltage		V_{GS}	±20	V
Drain Current	T_A=25	I_D	-3.9	A
	T_A=100		-2.5	
	T_C=25		-15	
	T_C =100		-9.5	
Pulsed Drain Current [A]		I_{DM}	-35	A
Avalanche energy [B]		EAS	64	mJ
Total Power Dissipation [C]	T_A=25	P_D	2.5	W
	T_A=100		1	
	T_C=25		43	
	T_C =100		17.2	
Junction and Storage Temperature Range		T_J ,T_{STG}	-55 +150	

■

Thermal Resistance Junction-to-Ambient [D]	Steady-State	$R_{\theta JA}$	40	50	/W
Thermal Resistance Junction-to-Case	Steady-State	$R_{\theta JC}$	2.4	2.9	

■ (Example)

YJQ15GP10AQ	F1	Q15GP10A	5000	10000	100000	13" reel



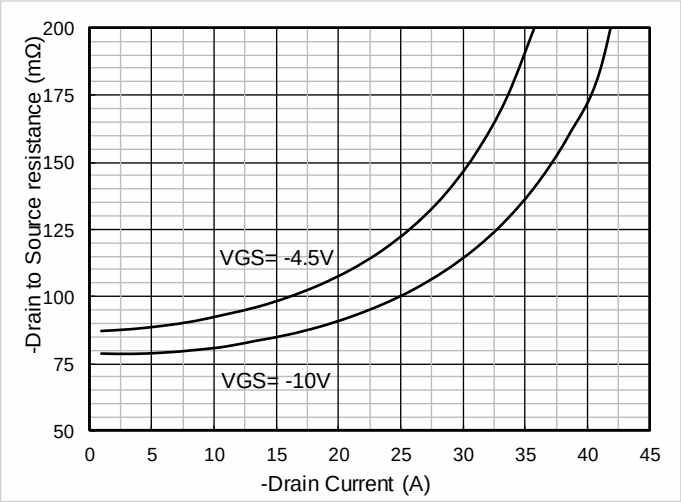


Figure 7. $R_{DS(on)}$ VS Drain Current

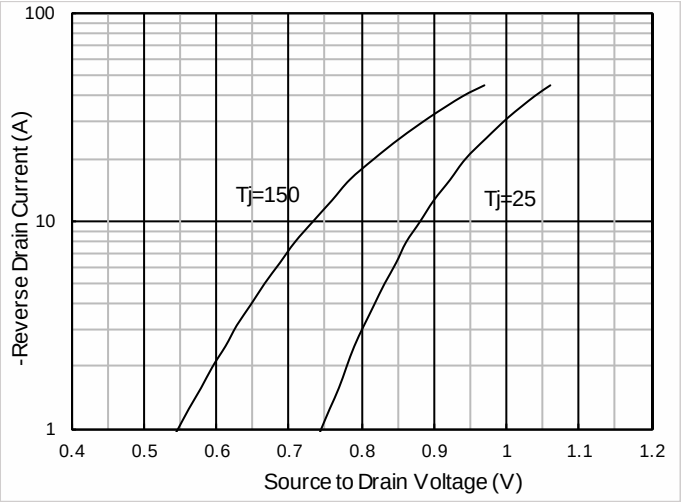


Figure 8. Forward characteristics of reverse diode

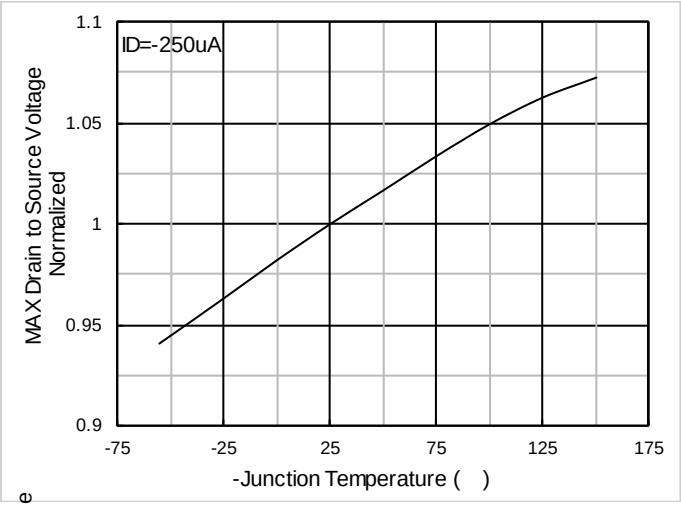


Figure 9. Normalized breakdown voltage

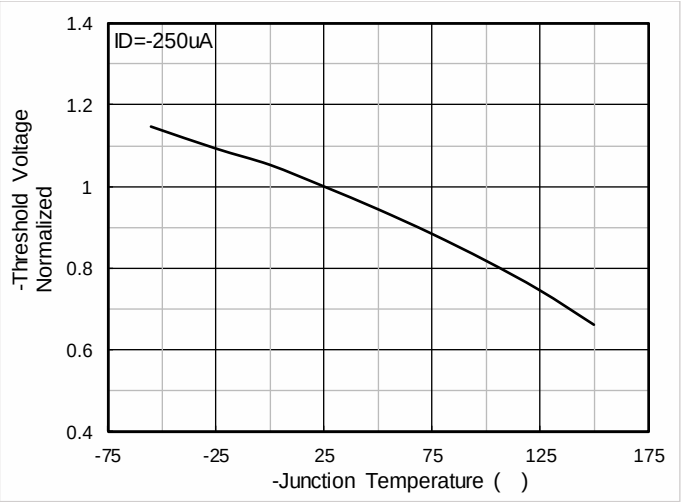
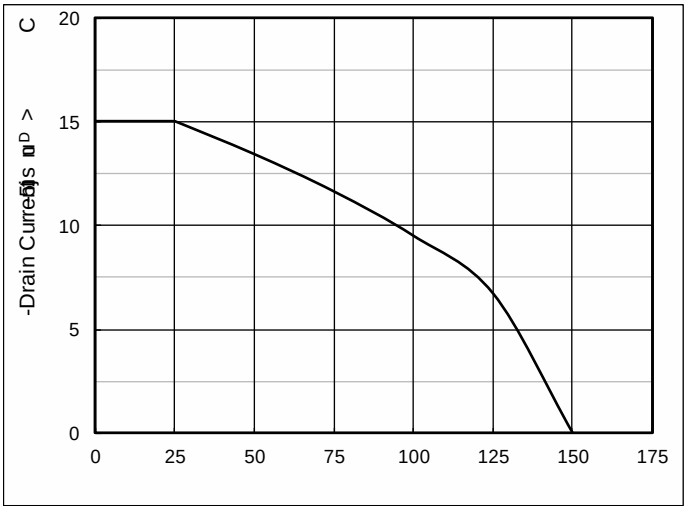


Figure 10. Normalized Threshold voltage



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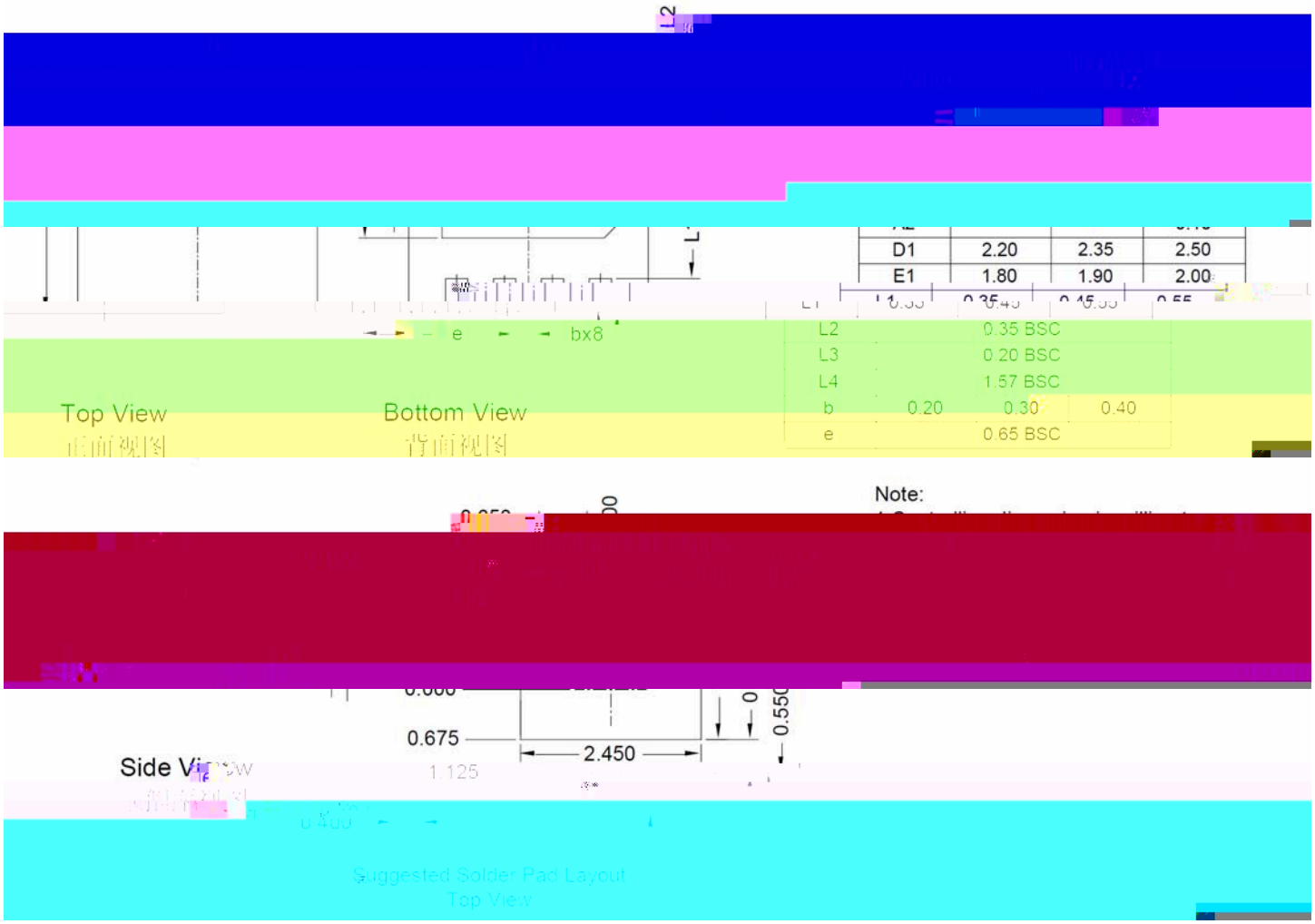
L2
e
bx8
Top View
Bottom View
D1 2.20 2.35 2.50
E1 1.80 1.90 2.00
L2 0.35 BSC
L3 0.20 BSC
L4 1.57 BSC
b 0.20 0.30 0.40
e 0.65 BSC
Note:
0.675
2.450
0.550
Side View
Suggested Solder Pad Layout
Top View