N-Channel Enhancement Mode Field Effect Transistor

Product Summary

- V_{DS} 100V
- I_D 50A
- $R_{DS(ON)}$(at V_{GS}=10V) 12mΩ
- $R_{DS(ON)}$(at V_{GS}=6V) 13mΩ
- 100% EAS Tested
- 100% V_{DS} Tested

General Description

- Split gate trench MOSFET technology
- Excellent package for heat dissipation
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free

Applications

- Power switching application
- Uninterruptible power supply
- DC-DC convertor

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

Parameter		Symbol	Limit	Unit
Drain-source Voltage		V_{DS}	100	V
Gate-source Voltage		V_{GS}	±20	V
Drain Current	T_A=25	I_D	8	A
	T_A=100		5	
	T_C=25		50	
	T_C =100		31	
Pulsed Drain Current [A]		I_{DM}	200	A
Avalanche energy [B]		EAS	169	mJ
Total Power Dissipation [C]	T_A=25	P_D	2	W
	T_A=100		0.8	
	T_C=25		41	
	T_C =100		16	
Junction and Storage Temperature Range		T_J , T_{STG}	-55 +150	

■Thermal resistance

Parameter		Symbol	Typ	Max	Units
Thermal Resistance Junction-to-Ambient [D]	Steady-State	$R_{\theta JA}$	50	65	/W
Thermal Resistance Junction-to-Case	Steady-State	$R_{\theta JC}$			

Typical Electrical and Thermal Characteristics Diagrams

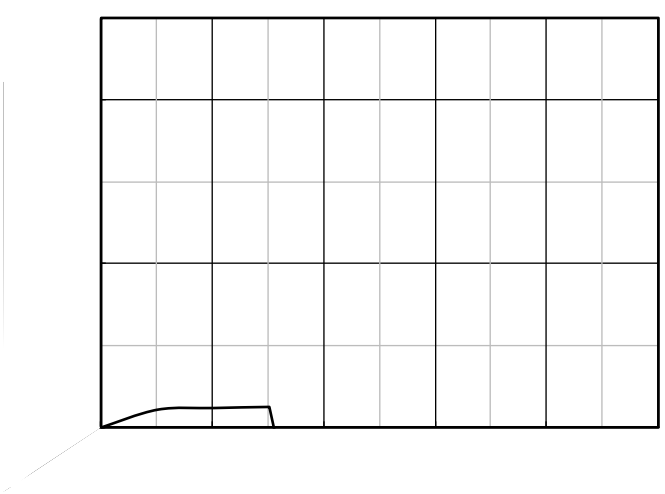


Figure 1. Output Characteristics

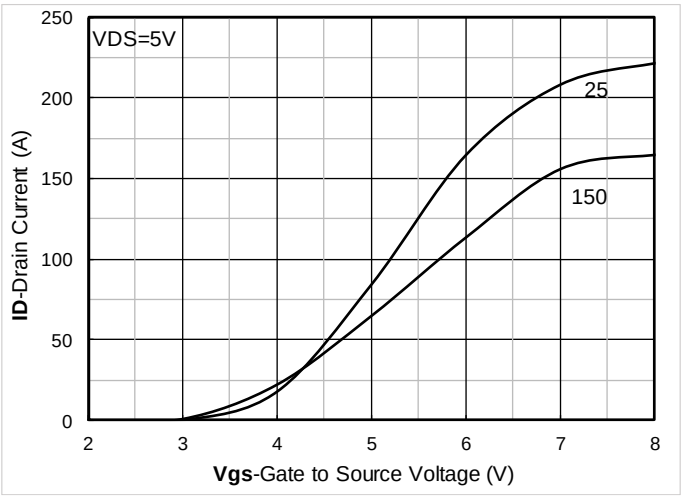


Figure 2. Transfer Characteristics

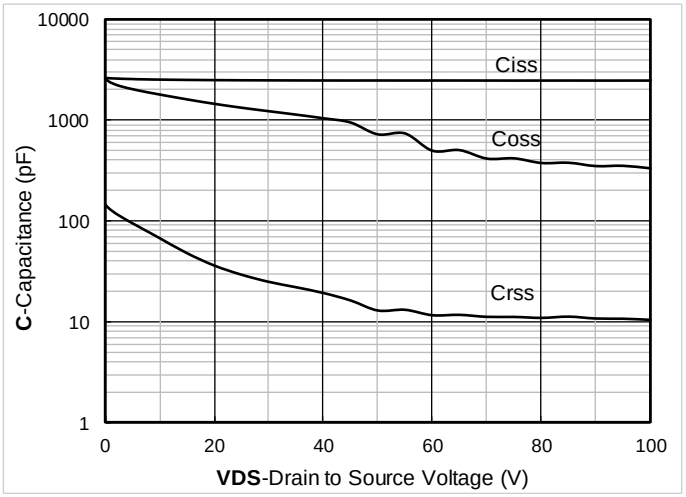


Figure 3. Capacitance Characteristics

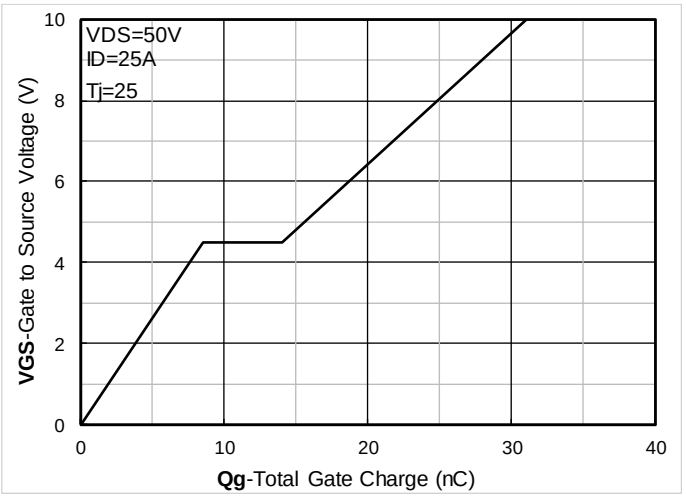
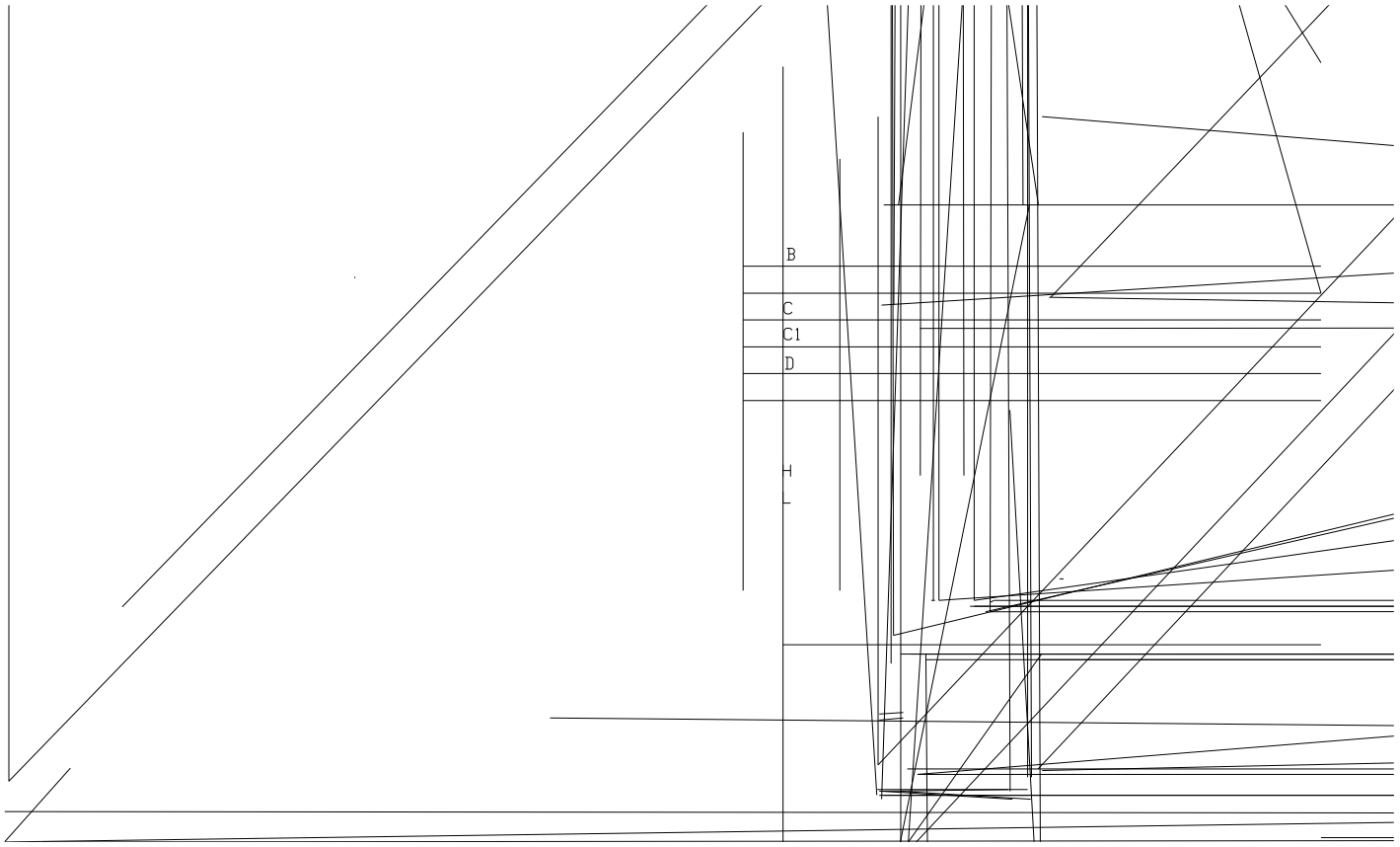


Figure 3[0.0300i)-15e4(.800884t)-.92 reW* nBT/F

■ ITO-220AB-B Package information