

DESCRIPTION

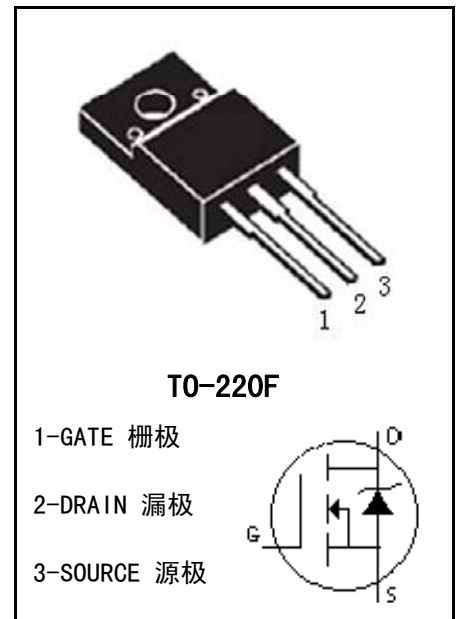
- ELECTRONIC BALLAST
- ELECTRONIC TRANSFORMER
- SWITCH MODE POWER SUPPLY

FEATURES:

- LOW THERMAL RESISTANCE
- HIGH INPUT RESISTANCE
- FAST SWITCHING
- ROHS COMPLIANT

MAXIMUM RATINGS (Tc=25°C)

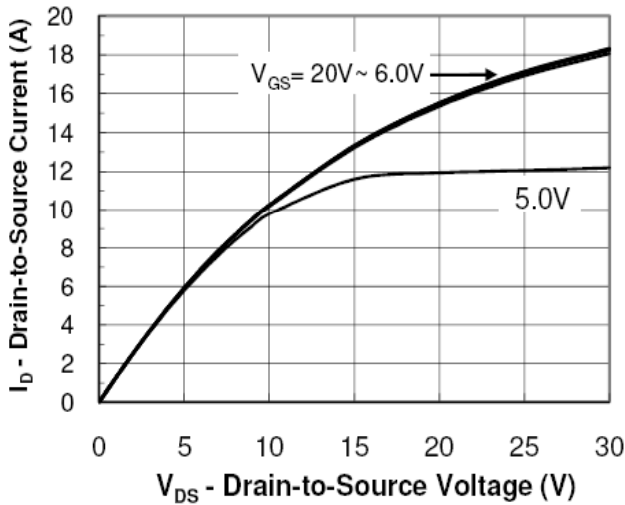
PARAMETER	SYMBOL	VALUE	UNIT
Drain-source Voltage	VDS	600	V
gate-source Voltage	VGS	±30	V
Continuous Drain Current (TC=25°C)	ID	10	A
Drain Current-Pulsed	IDM	40	A
Total Dissipation	PD	50	W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55-150	°C
Single Pulse Avalanche Energy	EAS	800	mJ

MECHANICAL

ELECTRONIC CHARACTERISTICS (Tc=25°C)

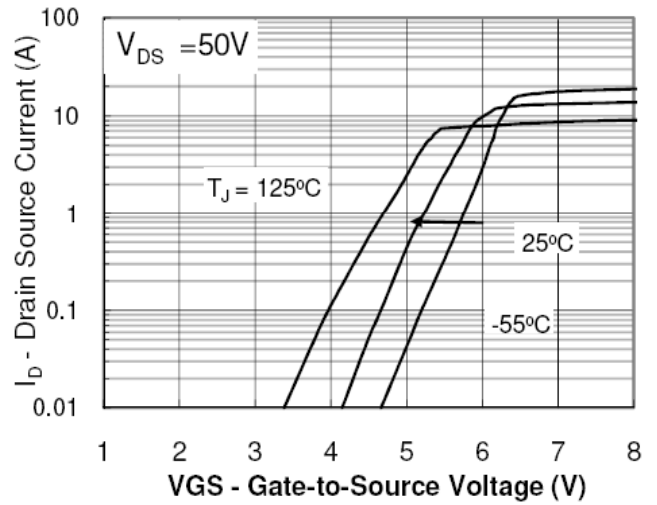
CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Drain-source Breakdown Voltage	BVDSS	VGS=0V, ID=250 μ A	600		V
Gate Threshold Voltage	VGS (TH)	VGS=VDS, ID=250 μ A	2	4	V
Drain-source Leakage Current	IDSS	VDS=600V, VGS=0V		10	uA
Drain-Source Diode Forward Voltage	VSD	VGS=0V, IS=10A		1.4	V
Gate-body Leakage Current (VDS = 0)	IGSS	VGS=±30V		±100	nA
Forward Transconductance	gfs	Vds=10V Id=5A	5		S
Static Drain-source On Resistance	RDS (ON)	VGS=10V, ID=5A		0.75	Ω
Thermal Resistance Junction-case	RthJ-c			2.5	°C/W



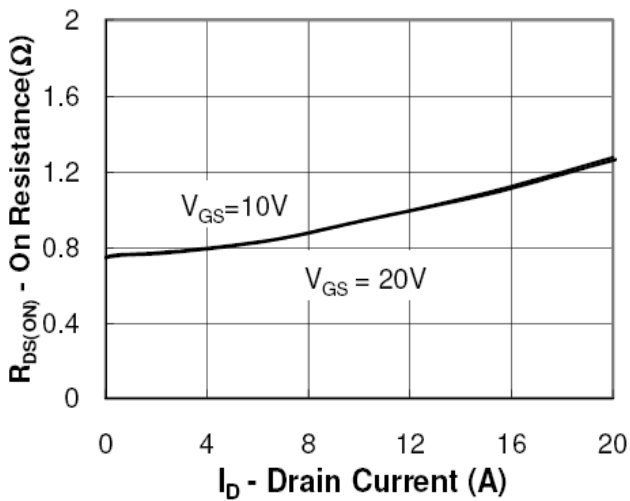
CHARACTERISTICS CURVE



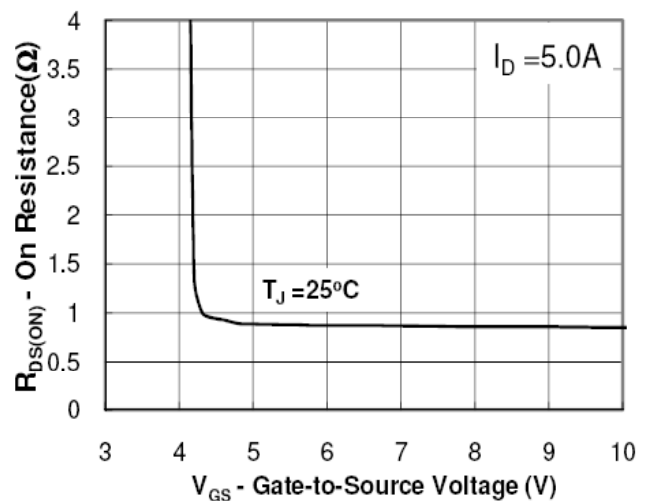
Output Characteristic



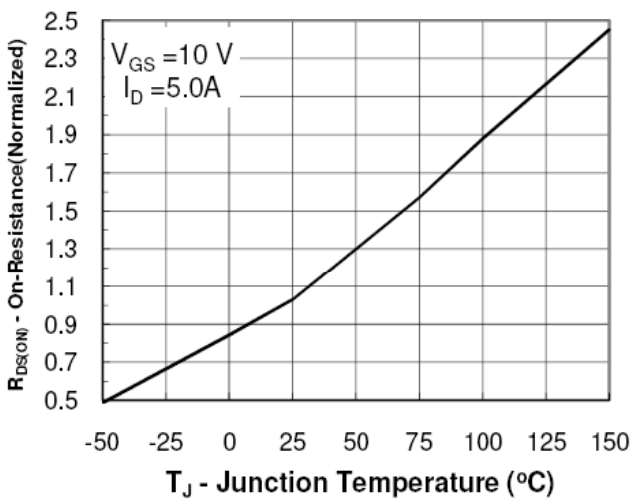
Transfer Characteristic



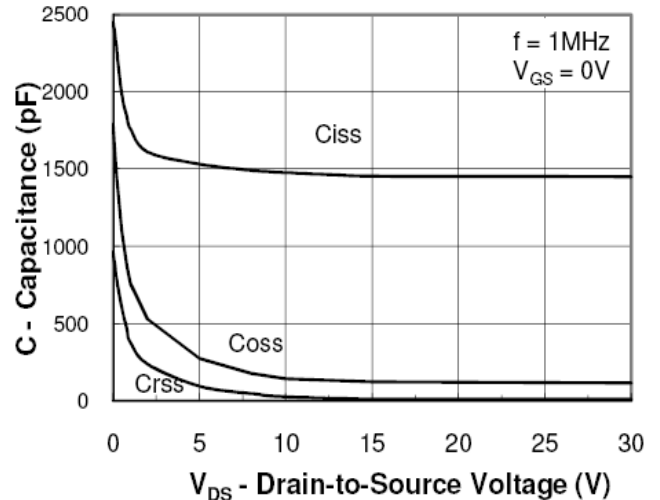
On Resistance Vs Drain Current



On Resistance Vs Gate Source Voltage



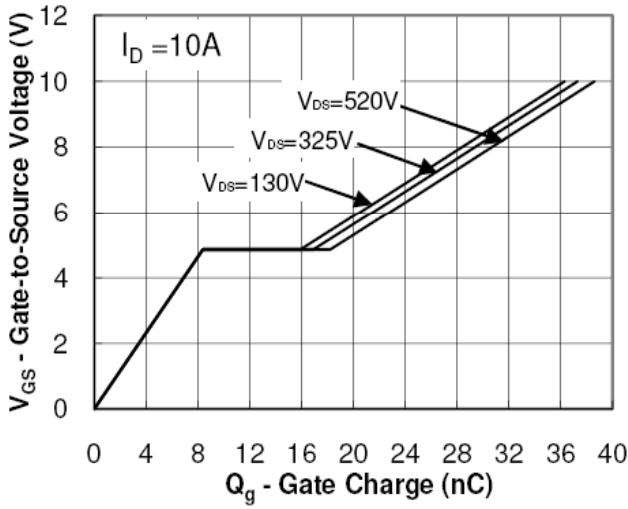
On Resistance Vs Junction Temperature



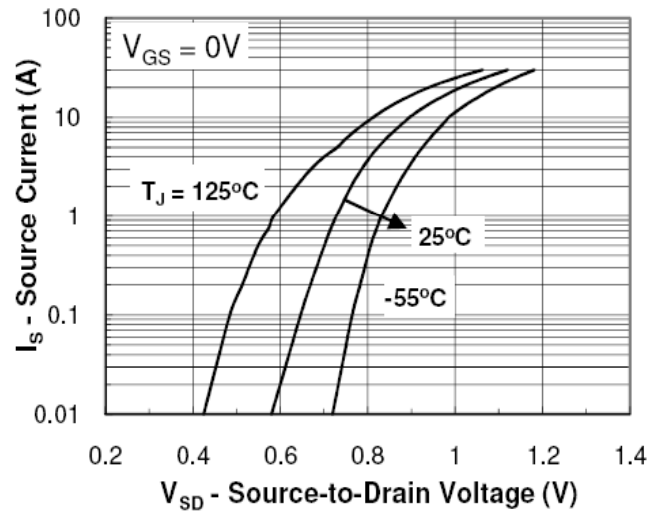
Capacitance



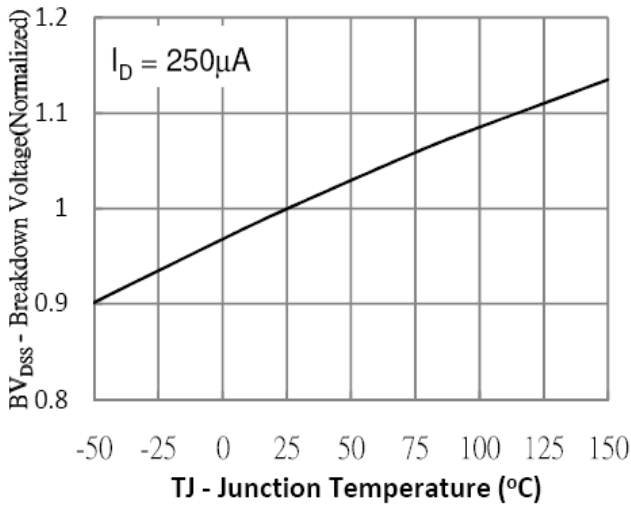
CHARACTERISTICS CURVE



Gate Charge Waveform



Source-Drain Diode Forward Voltage



Breakdown Voltage Vs Junction Temperature

TO-220F MECHANICAL DATA

UNIT: mm

SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
A	4.5		4.9	E1	6.5	7	7.5
A1	2.3		2.9	e	2.44	2.54	2.64
b	0.65		0.9	L	12.5		14.3
b1	1.1		1.7	L1	9.45		10.05
b2	1.2		1.4	L2	15		16
c	0.35		0.65	L3	3.2		4.4
D	14.5		16.5	ΦP	3		3.3
D1	6.1		6.9	Q	2.5		2.9
E	9.6		10.3				

