■ DESCRIPTION

●ELECTRONIC BALLAST

●ELECTRONIC TRANSFORMER

●SWITCH MODE POWER SUPPLY

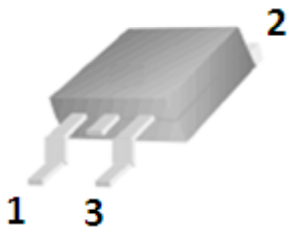
■ FEATURES:

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

■ MAXIMUM RATINGS (Tc=25℃)

PARAMETER	SYMBOL	VALUE	UNIT
Drain-source Voltage	VDS	650	V
gate-source Voltage	VGS	±30	V
Continuous Drain Current(TC=25℃)	ID	2	A
Drain Current-Pulsed	IDM	8	A
Total Dissipation	PD	45	W
Junction Temperature	Tj	150	℃
Storage Temperature	Tstg	-55-150	℃
Single Pulse Avalanche Energy	EAS	130	mJ

■ MECHANICAL

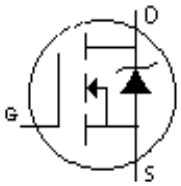


TO-252

1-GATE 栅极

2-DRAIN 漏极

3-SOURCE 源极



■ ELECTRONIC CHARACTERISTICS (Tc=25℃)

CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN	MAX	UNIT
Drain-source Breakdown Voltage	BVDSS	VGS=0V, ID=250μA	650		V
Gate Threshold Voltage	VGS(TH)	VGS=VDS ,ID=250μA	2	4	V
Drain-source Leakage Current	IDSS	VDS=650V,VGS=0V		25	uA
Drain-Source Diode Forward Voltage	VSD	VGS=0V, IS=2A		1.4	V
Gate-body Leakage Current (VDS = 0)	IGSS	VGS=±30V		±100	nA
Forward Transconductance	gfs	Vds=10V Id=1A	0.8		S
Static Drain-source On Resistance	RDS(ON)	VGS=10V,ID=1A		5.5	Ω
Thermal Resistance Junction-case	RthJ-c			4.5	℃/W

■ DYNAMIC CHARACTERISTICS (Tc=25℃)

CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Input Capacitance	Ciss	VDS=25V, VGS=0V, f=1.0MHZ	-	311	-	pF
output Capacitance	Coss		-	40	50	pF
Reverse Transfer Capacitance	Crss		-	5	7	pF

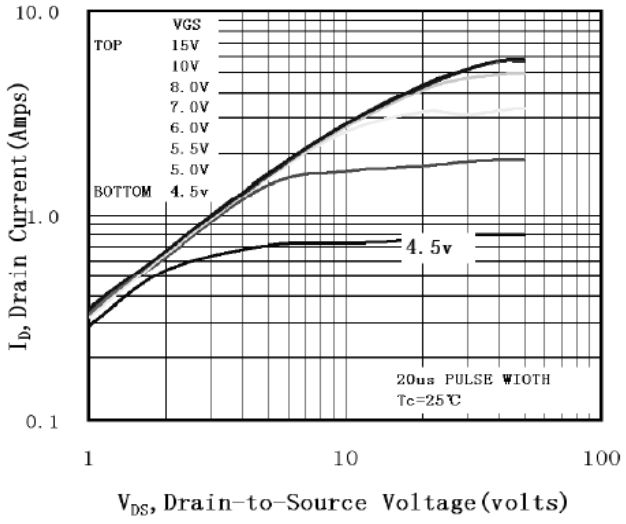
■ SWITCHING CHARACTERISTICS (Tc=25℃)

CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Turn-On Delay Time	td(on)	VDD=325V, ID=2.0A, RG=25Ω	-	10	30	ns
Turn-On Rise Time	tr		-	25	60	ns
Turn-Off Delay Time	td(off)		-	24	50	ns
Turn-Off Rise Time	tf		-	25	60	ns
Total Gate Charge	Qg	VDS=520V, ID=2.0A, VGS=10V	-	9	11	nC
Gate-Source Charge	Qgs		-	1.6	-	nC
Gate-Drain Charge	Qgd		-	4.3	-	nC

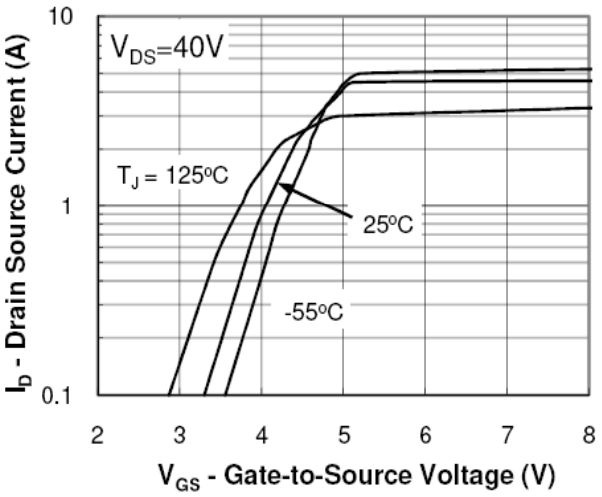
■ DRAIN-SOURCE DIODE MAXIMUM RATINGS AND CHARACTERISTICS (Tc=25℃)

CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Max. Diode Forward Cuurent	Is		-	-	2	A
Max. Pulsed Forward Cuurent	ISM		-	-	8	A
Diode Forward Voltage	VSD	VGS=0V, IS=2.0A	-	-	1.4	V
Reverse Recovery Time	trr	VGS=0V, IS=2.0A, dIF/dt=100A/μs	-	368	-	ns
Reverse Recovery Charge	Qrr		-	1	-	μC

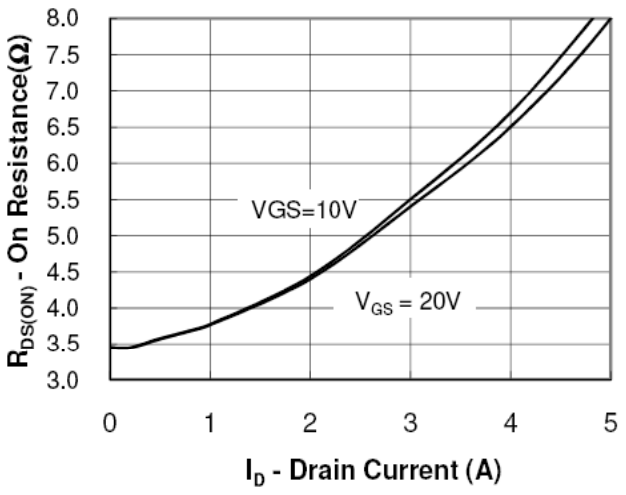
■ CHARACTERISTICS CURVE



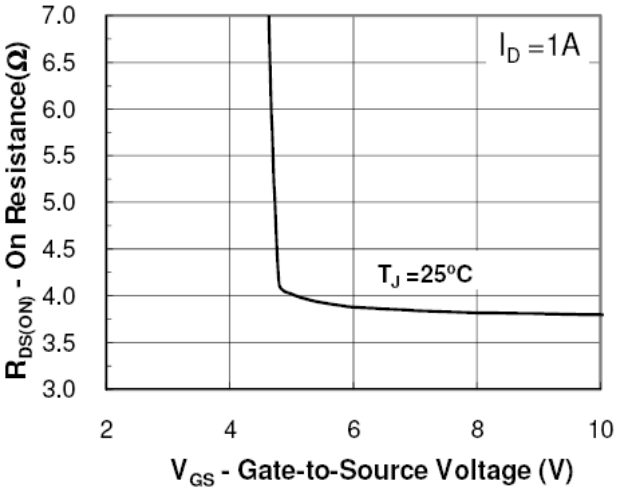
Output Characterisic



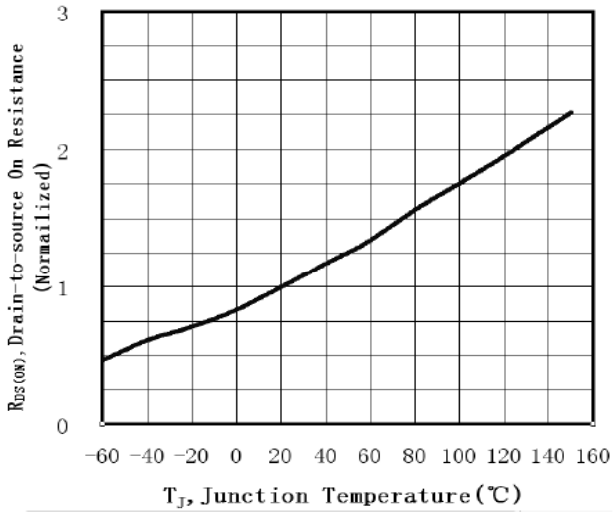
Transfer Characterisic



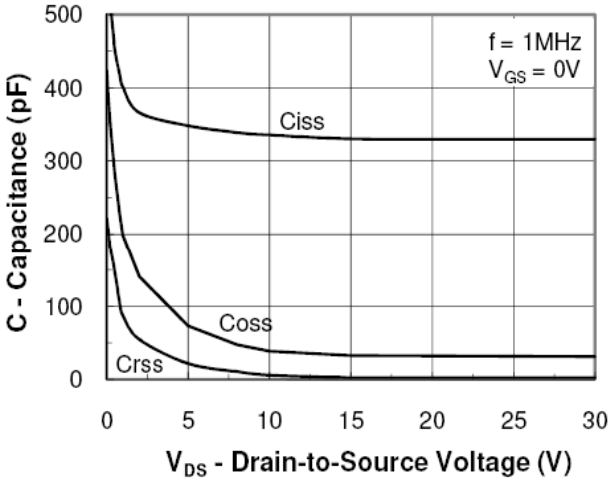
On Resistance Vs Drain Current



On Resistance Vs Gate Source Voltage

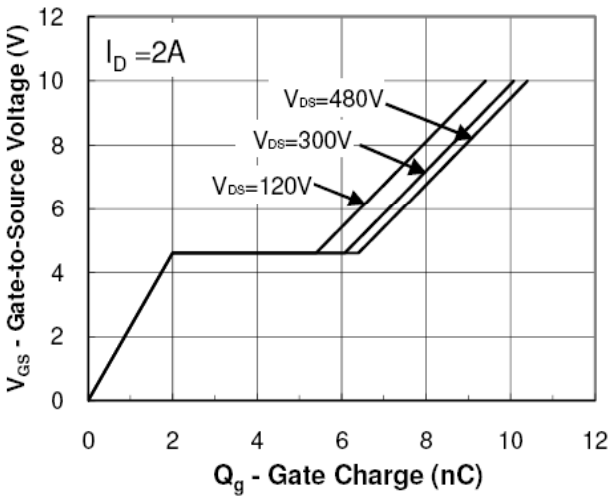


On Resistance Vs Junction Temperature

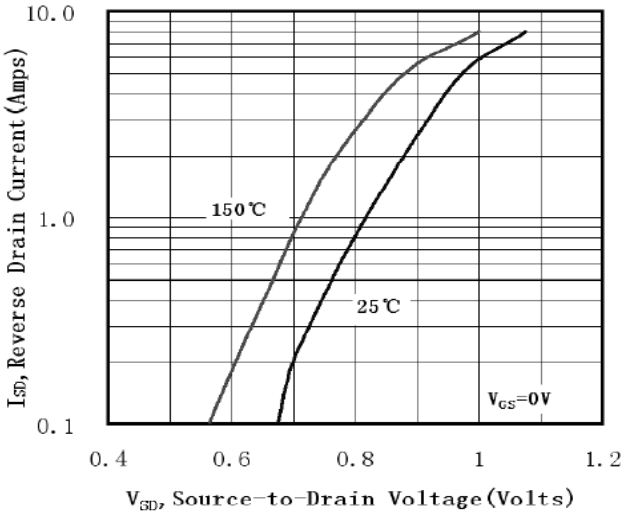


Capacitance

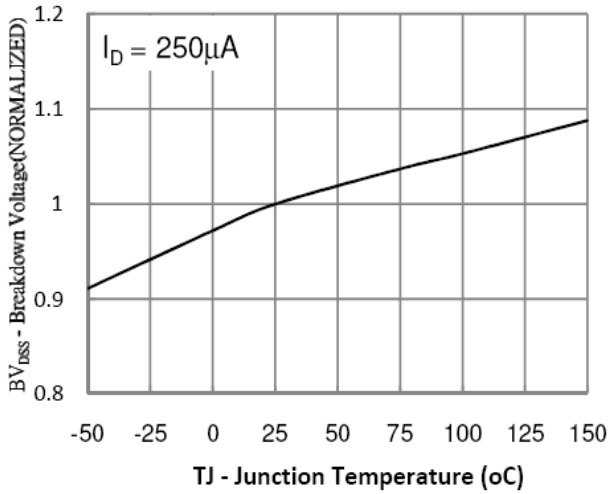
■ CHARACTERISTICS CURVE



Gate Charge Waveform



Source-Drain Diode Forward Voltage



Breakdown Voltage Vs Junction Temperature

TO-252 MECHANICAL DATA

UNIT: mm

SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
A	2.10		2.50	E	5.80		6.30
B	0.80		1.25	e1	2.25	2.30	2.35
b	0.50		0.85	e2	4.45		4.75
b1	0.50		0.90	L1	9.50		10.20
b2	0.45		0.60	L2	0.90		1.45
C	0.45		0.60	L3	0.60		1.10
D	6.35		6.75	K	-0.1		0.10
D1	5.10		5.50