■ DESCRIPTION

●ELECTRONIC BALLAST

●ELECTRONIC TRANSFORMER

●SWITCH MODE POWER SUPPLY

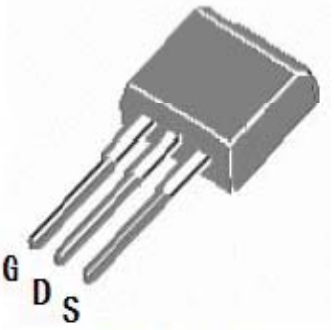
■ FEATURES:

●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	7	A
Drain Current-Pulsed	IDM	20	A
Total Dissipation	PD	65	W
Junction Temperature	Tj	150	℃
Storage Temperature	Tstg	-55-150	℃
Single Pulse Avalanche Energy (I_{AS}=7A)	EAS	95	mJ

■ MECHANICAL



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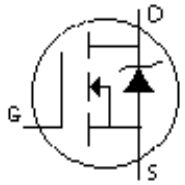
1-GATE 栅极

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	2.5	4.5	V
Drain-source Leakage Current	IDSS	VDS=650V,VGS=0V		1	uA
Drain-Source Diode Forward Voltage	VSD	VGS=0V, IS=7A		1.3	V
Gate-body Leakage Current (VDS = 0)	IGSS	VGS=±30V		±100	nA
Static Drain-source On Resistance	RDS(ON)	VGS=10V,ID=3.5A		700	mΩ
Thermal Resistance Junction-case	RthJ-c			1.92	℃/W

■ DYNAMIC CHARACTERISTICS (Tc=25℃)

CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Input Capacitance	Ciss	VDS=25V, VGS=0V, f=1.0MHZ	-	380	-	pF
output Capacitance	Coss		-	110	-	pF
Reverse Transfer Capacitance	Crss		-	7	-	pF

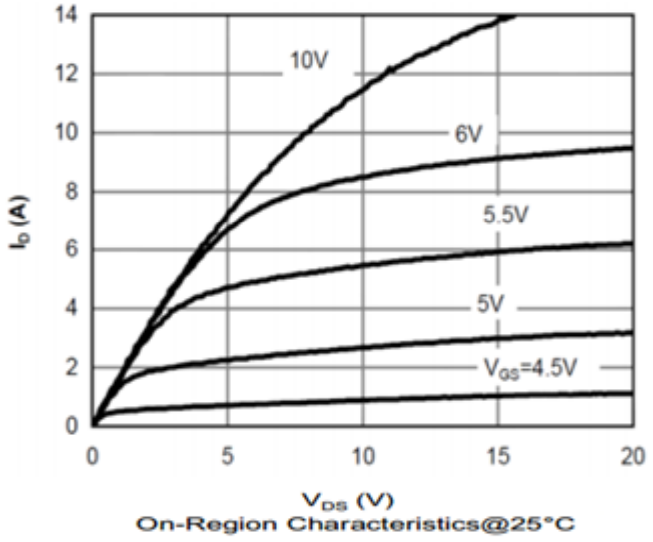
■ SWITCHING CHARACTERISTICS (Tc=25℃)

CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Turn-On Delay Time	td(on)	VDD=400V, ID=3.5A, RG=20Ω, VGS=10V	-	13	-	ns
Turn-On Rise Time	tr		-	10	-	ns
Turn-Off Delay Time	td(off)		-	85	-	ns
Turn-Off Rise Time	tf		-	14	-	ns
Total Gate Charge	Qg	VDS=480V, ID=3.5A, VGS=10V	-	25	-	nC
Gate-Source Charge	Qgs		-	2	-	nC
Gate-Drain Charge	Qgd		-	2.7	-	nC

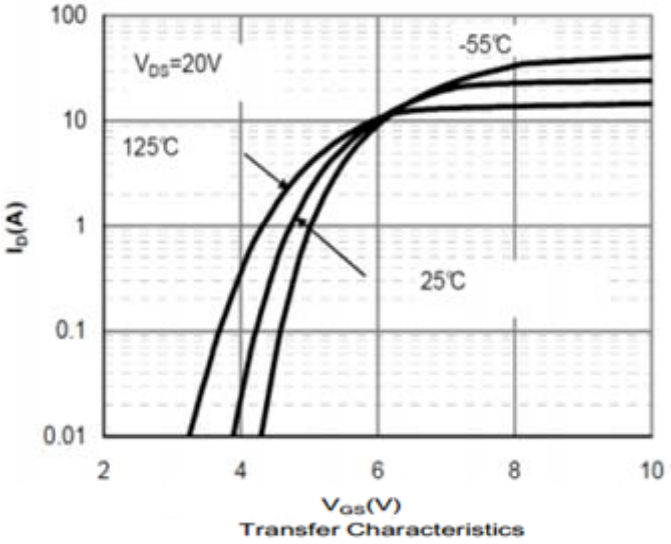
■ DRAIN-SOURCE DIODE MAXIMUM RATINGS AND CHARACTERISTICS (Tc=25℃)

CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Max. Diode Forward Cuurent	Is		-	-	7	A
Max. Pulsed Forward Cuurent	ISM		-	-	20	A
Diode Forward Voltage	VSD	VGS=0V, IS=7A	-	-	1.3	V
Reverse Recovery Time	trr	VGS=0V, IS=3.5A, dIF/dt=100A/μs,	-	190	-	ns
Reverse Recovery Charge	Qrr		-	2.3	-	μC

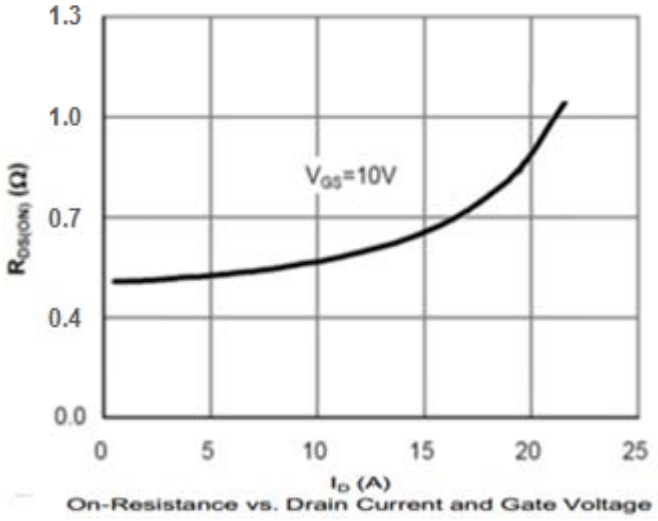
■ CHARACTERISTICS CURVE



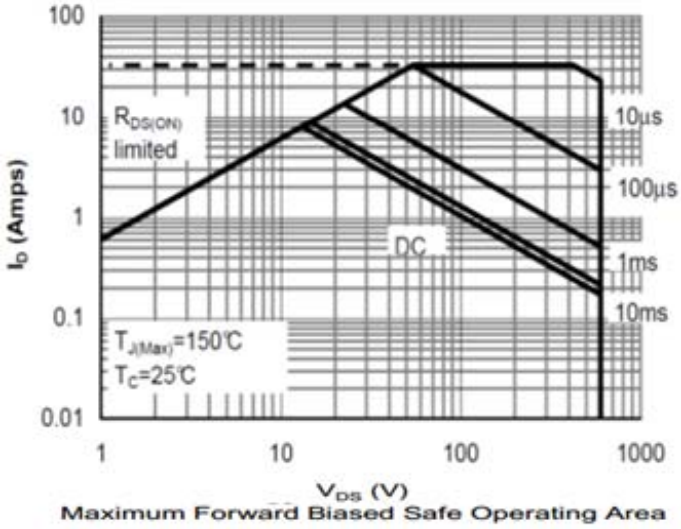
Output Characterisic



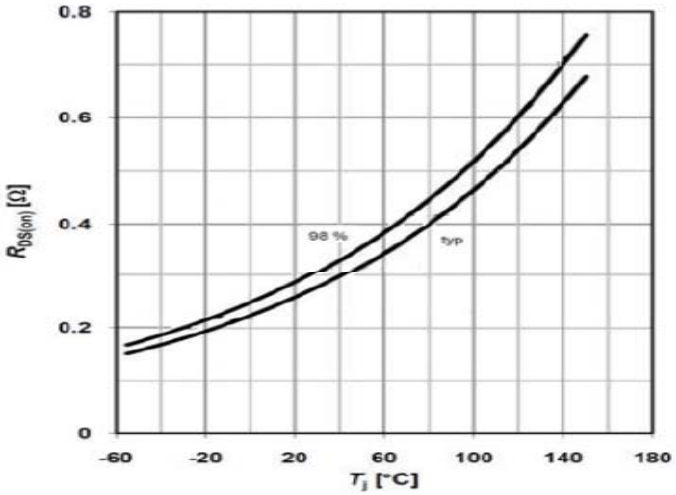
Transfer Characterisic



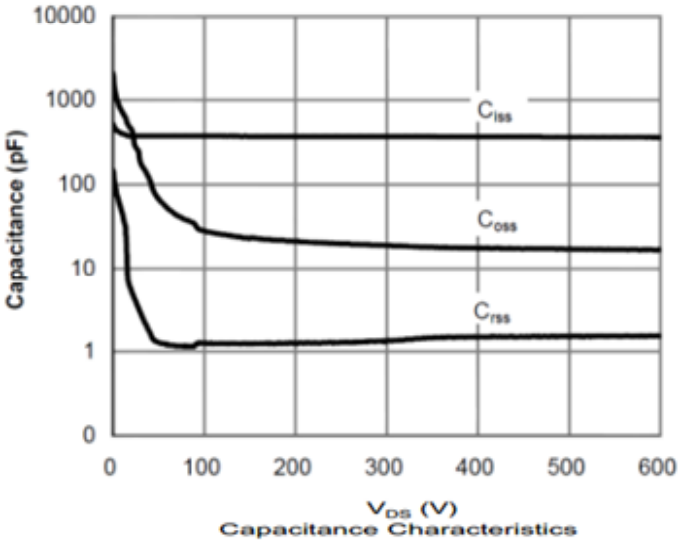
On Resistance Vs Drain Current



Safe Operating Area

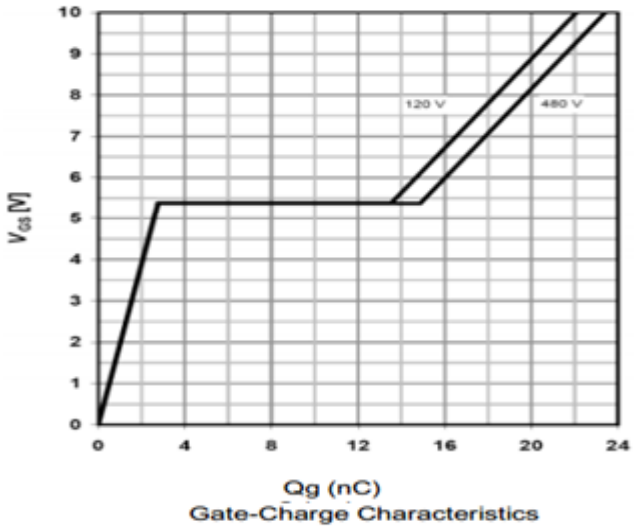


On Resistance Vs Junction Temperature

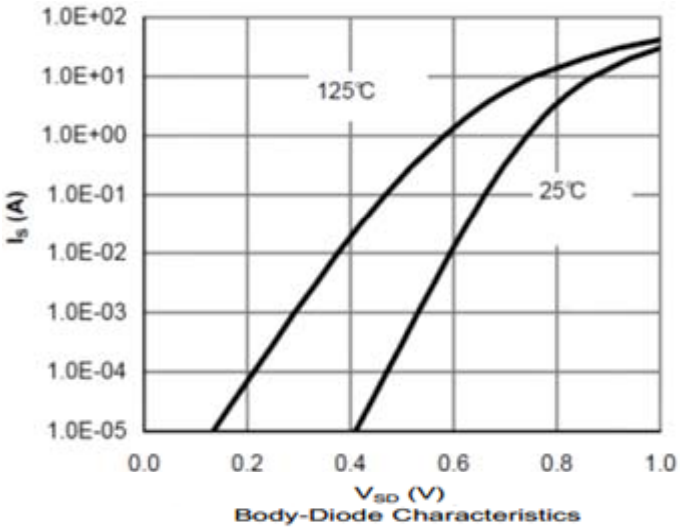


Capacitance

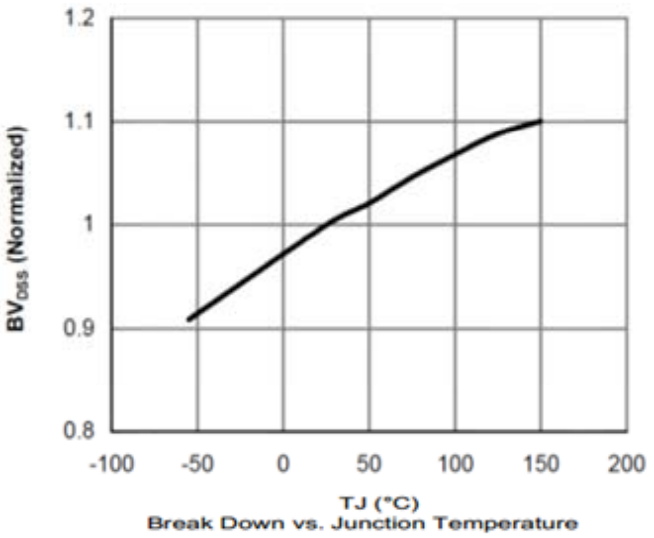
■ CHARACTERISTICS CURVE



Gate Charge Waveform



Source-Drain Diode Forward Voltage



Breakdown Voltage Vs Junction Temperature

TO-262 MECHANICAL DATA

UNIT: mm

SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
A	4.42		4.72	e	2.44	2.54	2.64
A1	2.40		2.80	e1	4.98		5.18
b	0.76		0.86	E	9.95		10.25
b1	1.22		1.40	L	12.50		13.60
C	0.33		0.43	L1	3.30	3.50	3.80
C2	1.22		1.35	L2	1.22		1.40
D	8.99		9.29