T_C =25

Parameter	**Symbol**	Rating	Unit
Drain-Source Voltage	V_{DS}	40	V
Gate-Source Voltage	V_{GS}	±20	V
Continuous Drain Current	$I_{D@}$TC=25	30	A
	$I_{D@}$TC=75	23	A
	$I_{D@}$TC=100	19	A
Pulsed Drain Current	I_{DM}	60	A
Total Power Dissipation	P_D@TC=25	60	W
Total Power Dissipation	P_D@TA=25	1.8	W
Operating Junction Temperature	T_J	-55 to 150	
Storage Temperature	T_{STG}	-55 to 150	
Single Pulse Avalanche Energy	E_{AS}	66	mJ

Avalanche Current	I_{AS} I_{AR}	25	A

Thermal resistance

Parameter	Symbol	Min.	Typ.	Max.	Unit
Thermal resistance, junction - case	R_{thJC}	-	-	2.1	° C/W
Thermal resistance, junction - ambient	R_{thJA}	-	-	70	° C/W
Soldering temperature, wavesoldering for 10s	T_{sold}	-	-	265	° C

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS} =0V,I_D =250uA	40			V
Gate Threshold Voltage	$V_{GS(TH)}$	V_{GS} =V_{DS}, I_D =250uA	1.2		2.5	V
Drain-Source Leakage Current	I_{DSS}	V_{DS}=40V, V_{GS} =0V			1.0	uA
Gate- Source Leakage Current	I_{GSS}	V_{GS}=±20V ,V_{DS} =0V			100	nA
Static Drain-source On Resistance	$R_{DS(ON)}$	V_{GS}=10V, I_D=20A				
		V_{GS}=4.5V, I_D=10A				
Forward Transconductance	g_{FS}	V_{DS} =25V, I_D=10A				

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Input capacitance	Ciss	f = 1MHz	-	1580	-	pF
Output capacitance	Coss		-	270	-	
Reverse transfer capacitance	Crss		-	140	-	

Gate Charge characteristics(T_a = 25)

Parameter	Symbol	Condition	Min.	Typ	Max.	Unit
Total gate charge	Qg	V_{DD} = 25V	-	17	-	nC
Gate - Source charge	Qgs	I_D = 5A	-	8	-	
Gate - Drain charge	Qgd	V_{GS} = 10V	-	10		

Fig.1 Power Dissipation

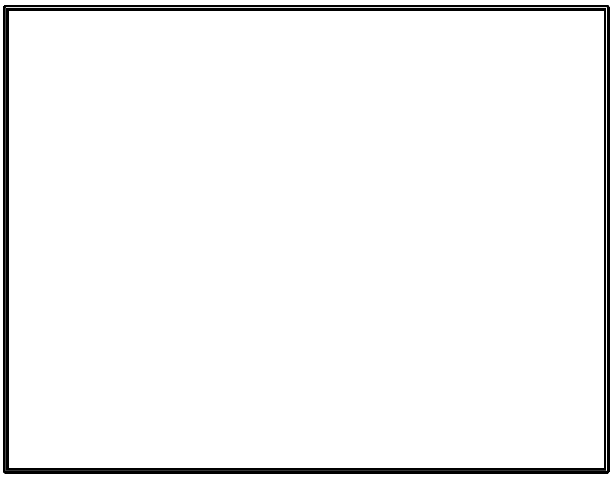

Fig.2 Typical output Characteristics

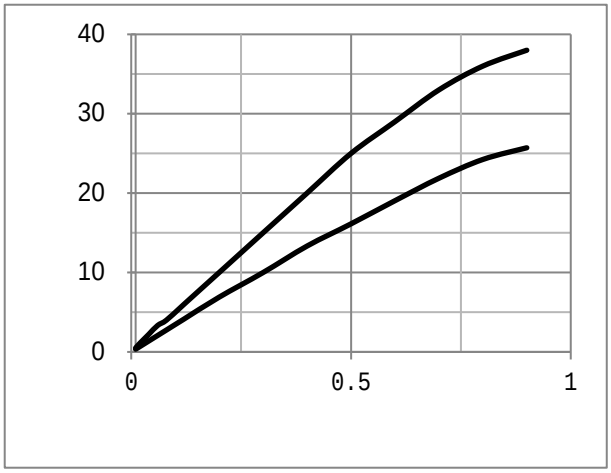

Fig.3 Threshold Voltage V.S Junction Temperature

Fig.4 Resistance V.S Drain Current

Fig.5 On-Resistance VS Gate Source Voltage

Fig.6 On-Resistance V.S Junction Temperature

sions DFN5×6