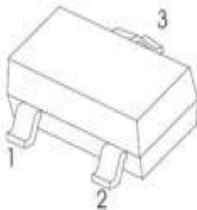
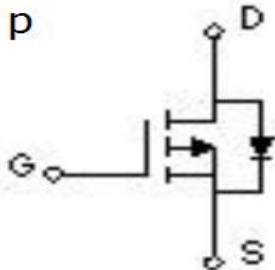
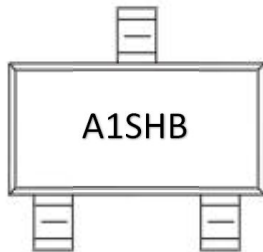


P-Channel 20-V(D-S) MOSFET		SOT-23 Plastic-Encapsulate MOSFETS	
<u>SOT-23</u>  1.GATE 2.SOURCE 3.DRAIN Equivalent Circuit 		Features ※ TrenchFET Power MOSFET Application ※ Load Switch for Portable Devices ※ DC/DC Converter MARKING 	
Maximum ratings (Ta=25℃ unless otherwise noted)			
Parameter	Symbol	Value	Unit
Drain-Source Voltage	VDS	-20	V
Gate-Source Voltage	VGS	±8	
Continuous Drain Current	ID	-2.3	A
Pulsed Diode Curren	IDM	-10	
Continuous Source-Drain Current(Diode Conduction)	IS	-0.72	
Power Dissipation	PD	0.35	W
Thermal Resistance from Junction to Ambient (t≤5s)	R θ JA	357	℃/W
Operating Junction	TJ	150	℃
Storage Temperature	TSTG	-55~+150	℃

MOSFET ELECTRICAL CHARACTERISTICS						
Static Electrical Characteristics (Ta = 25 °C Unless Otherwise Noted)						
Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Static						
Drain-source breakdown voltage	V(BR)DSS	VGS = 0V, ID =-250μA	-20			V
Gate-source threshold voltage	VGS(th)	VDS =VGS, ID =-250μA	-0. 4	-0. 75	-1	V
Gate-source leakage	IGSS	VDS =0V, VGS =±8V		±1. 3	±100	nA
Zero gate voltage drain current	IDSS	VDS =-20V, VGS =0V			-1	μA
Drain-source on-state resistancea	RDS(on)	VGS =-4.5V, ID = -2.8A		130	185	mΩ
		VGS =-2.5V, ID =-2A		175	280	mΩ
Forward transconductancea	gfs	VDS =-4.5V, ID =-2.8A		4		S
Diode forward voltage	VSD	IS=-0.8A,VGS=0V		-0. 8	-1. 3	V
Dynamic						
Input capacitance	Ciss	VDS =-10V,VGS =0V, f=1MHz		405		pF
Output capacitance	Coss			75		pF
Reverse transfer capacitanceb	Crss			55		pF
Total gate charge	Qg	VDS =-10V,VGS =-4.5V,ID =-3A		5. 5	10	nC
		VDS =-10V,VGS =-2.5V, ID =-3A		3. 3	6	
Gate-source charge	Qgs			0. 7		nC
Gate-drain charge	Qgd			1. 3		nC
Gate resistance	Rg	f=1MHz		6. 0		Ω
Switchingb						
Turn-on delay time	td(on)	VDD=-10V RL=10Ω, ID ≈-1A, VGEN=-4.5V,Rg=1Ω		11	20	ns
Rise time	tr			35	60	ns
Turn-off delay time	td(off)			30	50	ns
Fall time	tf			10	20	ns
Drain-source body diode characteristics						
Continuous Source-Drain Diode Current	IS	Tc=25°C			-1. 3	A
Pulsed Diode forward Curren	ISM				-10	A
Note :						
1. Repetitive Rating : Pulse width limited by maximum junction temperature.						
2. Surface Mounted on FR4 Board, t < 5 sec.						
3. Pulse Test : Pulse Width≤300μs, Duty Cycle ≤ 2%.						
4. Guaranteed by desig n, not subj ect to p roduction testing .						

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS

