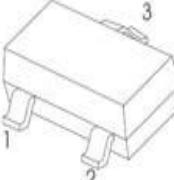
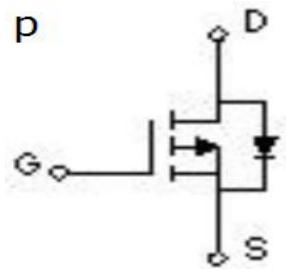
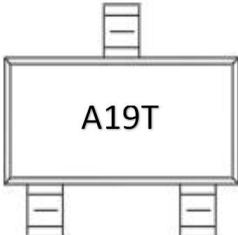


<p>P-Channel 30-V(D-S) MOSFET</p> <p><u>SOT-23</u></p>  <p>1.GATE 2.SOURCE 3.DRAIN</p> <p><b>Equivalent Circuit</b></p> 	<p><b>SOT-23 Plastic-Encapsulate MOSFETS</b></p> <p><b>Features</b></p> <ul style="list-style-type: none"> <li>※ TrenchFET Power MOSFET</li> <li>※ Exceptional on-resistance and maximum DC current capability</li> <li>※ High dense cell design for extremely low RDS(ON)</li> </ul> <p><b>Application</b></p> <ul style="list-style-type: none"> <li>※ Load Switch for Portable Devices</li> <li>※ DC/DC Converter</li> </ul> <p><b>MARKING</b></p> 
---	--

V(BR)DSS	RDS(on)MAX	ID
-30 V	60m Ω @ -10V	-4. 1A
	65m Ω @ -4.5V	
	100m Ω @ -2.5V	

**Maximum ratings ( Ta=25°C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Drain-Source Voltage	VDS	-30	V
Gate-Source Voltage	VGS	±12	
Continuous Drain Current	ID	-4. 1	A
Pulsed Diode Current	IDM	-15	
Continuous Source-Drain Current(Diode Conduction)	IS	-1	
Power Dissipation	PD	0. 35	W
Thermal Resistance from Junction to Ambient (t≤5s)	R θ JA	150	°C/W
Operating Junction	TJ	150	°C
Storage Temperature	TSTG	-55~+150	°C

### MOSFET ELECTRICAL CHARACTERISTICS

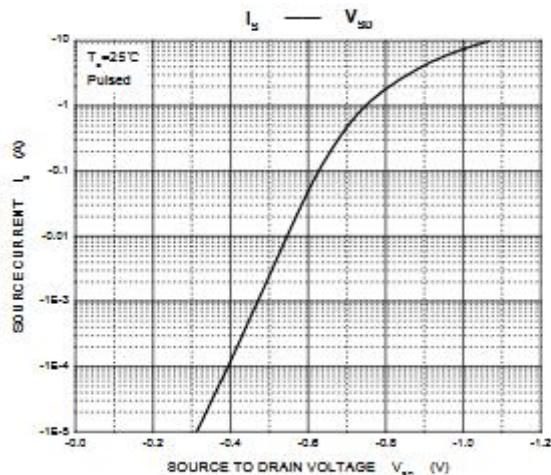
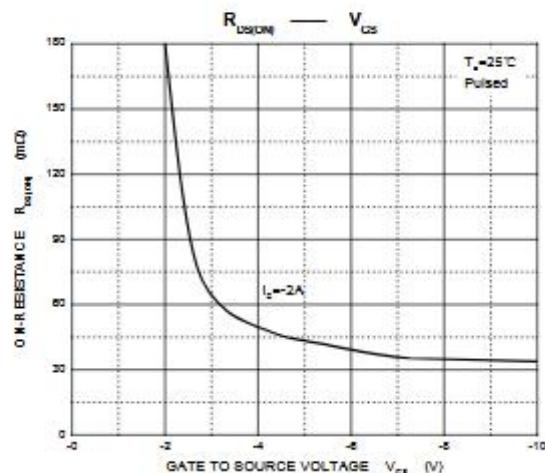
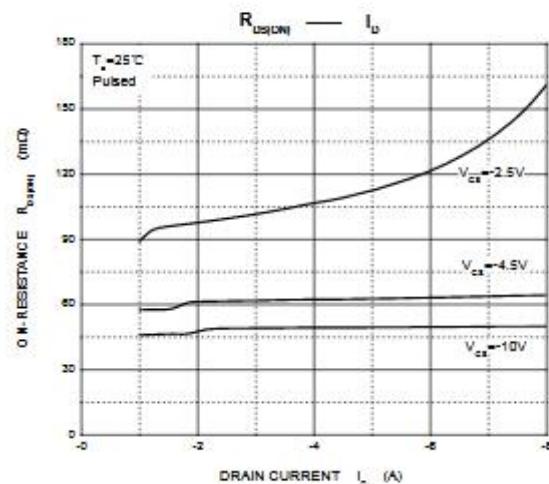
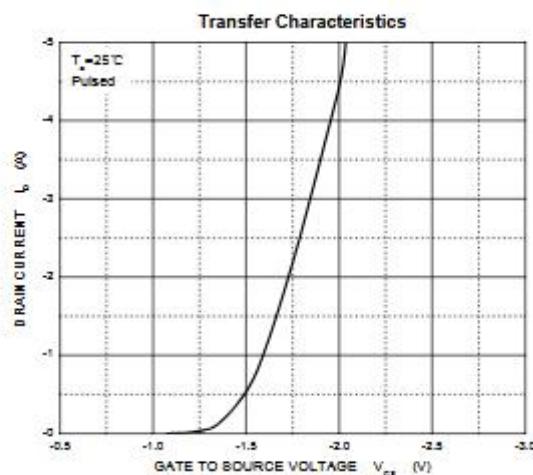
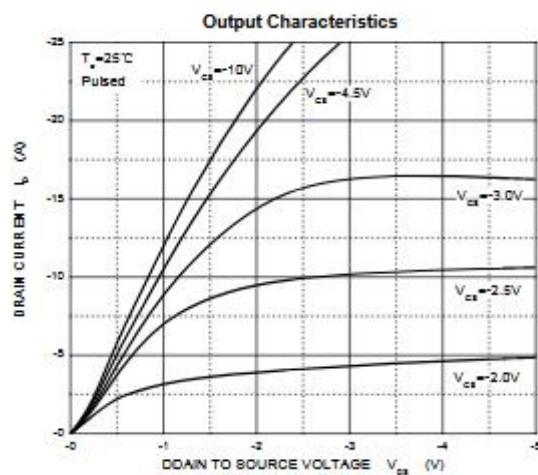
Static Electrical Characteristics ( $T_a = 25^\circ\text{C}$  Unless Otherwise Noted)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
<b>Static</b>						
Drain-source breakdown voltage	V(BR)DSS	$V_{GS} = 0V, ID = -250\mu\text{A}$	-30			V
Gate-source threshold voltage	$V_{GS(\text{th})}$	$V_{DS} = V_{GS}, ID = -250\mu\text{A}$	-0.6	0.9	-1.2	V
Gate-source leakage	$I_{GSS}$	$V_{DS} = 0V, V_{GS} = \pm 12V$			$\pm 100$	nA
Zero gate voltage drain current	$I_{DSS}$	$V_{DS} = -30V, V_{GS} = 0V$			1	$\mu\text{A}$
Drain-source on-state resistancea	RDS(on)	$V_{GS} = -10V, ID = -2.8\text{A}$		50	60	$\text{m}\Omega$
		$V_{GS} = -4.5V, ID = -2\text{A}$		55	65	$\text{m}\Omega$
		$V_{GS} = -2.5V, ID = -2\text{A}$		70	100	$\text{m}\Omega$
Forward transconductancea	$g_{fs}$	$V_{DS} = -4.5V, ID = 4\text{A}$	7			S
Diode forward voltage	$V_{SD}$	$IS=1\text{A}, V_{GS}=0V$		-0.7	-1.3	V
<b>Dynamic</b>						
Input capacitance	$C_{iss}$	$V_{DS} = -8V, V_{GS} = 0V, f = 1\text{MHz}$		954		pF
Output capacitance	$C_{oss}$			115		pF
Reverse transfer capacitanceb	$C_{rss}$			77		pF
Total gate charge	$Q_g$	$V_{DS} = -20V, V_{GS} = -4.5V, ID = -4.5\text{A}$		9.4		nC
Gate-source charge	$Q_{gs}$			2		nC
Gate-drain charge	$Q_{gd}$			3		nC
Gate resistance	$R_g$	$f = 1\text{MHz}$			3.6	$\Omega$
<b>Switchingb</b>						
Turn-on delay time	$t_{d(on)}$	$V_{DD} = -10V$ $RL = 10\Omega, ID \approx -1\text{A}$ , $V_{GEN} = -4.5V, R_g = 6\Omega$		6.3		ns
Rise time	$t_r$			3.2		ns
Turn-off delay time	$t_{d(off)}$			38.2		ns
Fall time	$t_f$			12		ns
<b>Drain-source body diode characteristics</b>						
Continuous Source-Drain Diode Current	$I_S$	$T_c = 25^\circ\text{C}$			-1.3	A
Pulsed Diode forward Current	$I_{SM}$				-20	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  $\leq 300\mu\text{s}$ , Duty Cycle  $\leq 2\%$ .
4. Guaranteed by design, not subject to production testing.

## Typical Characteristics:



单击下面可查看定价，库存，交付和生命周期等信息

[>>DIOS\(迪恩思\)](#)