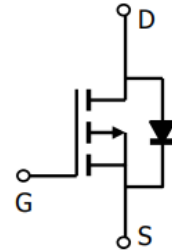


»Features

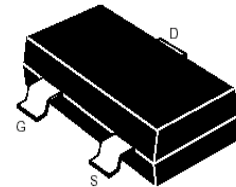
$V_{DS} = -30V$   
 $I_D = -4.1A$   
 $R_{DS(ON)} @V_{GS} = -10V, TYP = 55m\Omega$   
 $R_{DS(ON)} @V_{GS} = -4.5V, TYP = 75m\Omega$

»Pin Configurations



»General Description

- Advanced trench process technology
- High Density Cell Design For Ultra Low On-Resistance
- SOT-23 for Surface Mount Package.



»Absolute Maximum Ratings @ $T_A=25^\circ C$  unless otherwise noted

Characteristic	Symbol	Max	Unit
Drain-Source Voltage	$BV_{DSS}$	-30	V
Gate- Source Voltage	$V_{GS}$	$\pm 20$	V
Drain Current (continuous)	$I_D$	-4.1	A
Drain Current (pulsed)	$I_{DM}$	-16	A
Total Device Dissipation $T_A=25^\circ C$	$P_D$	1400	mW
Junction	$T_J$	150	$^\circ C$
Storage Temperature	$T_{stg}$	-55to+150	$^\circ C$

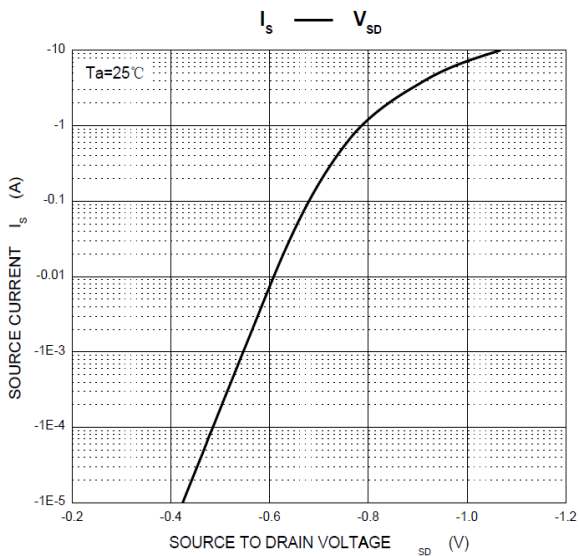
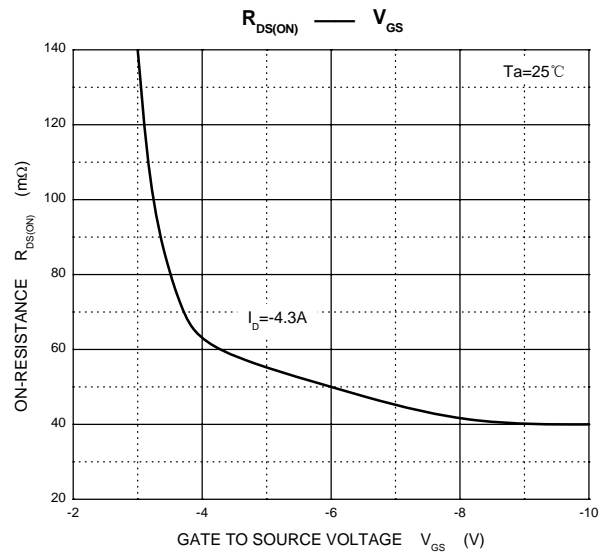
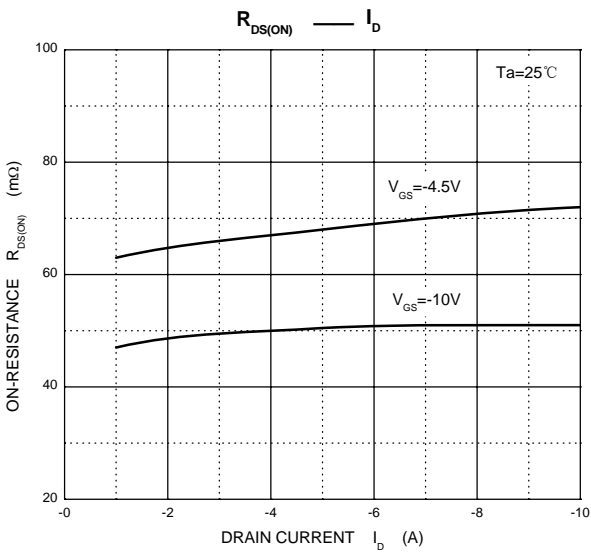
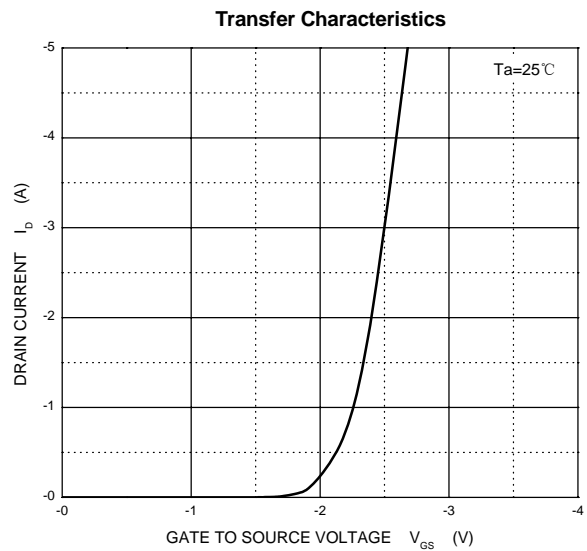
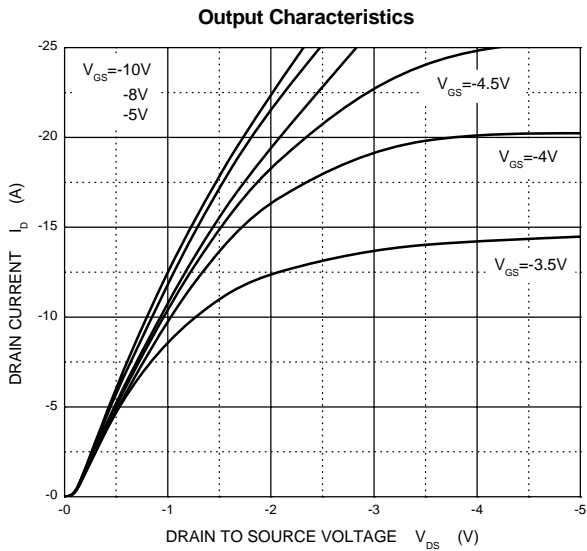
**»Electrical Characteristics @ $T_A=25^{\circ}\text{C}$  unless otherwise noted**

Characteristic	Symbol	Min	Typ	Max	Unit
Drain-Source Breakdown Voltage ( $I_D = -250\mu\text{A}, V_{GS}=0\text{V}$ )	$BV_{DSS}$	-30	—	—	V
Gate Threshold Voltage ( $I_D = -250\mu\text{A}, V_{GS}=V_{DS}$ )	$V_{GS(th)}$	-1	—	-2.5	V
Diode Forward Voltage Drop ( $I_S = -1\text{ A}, V_{GS}=0\text{V}$ )	$V_{SD}$	—	—	-1	V
Zero Gate Voltage Drain Current ( $V_{GS}=0\text{V}, V_{DS}= -24\text{V}$ ) ( $V_{GS}=0\text{V}, V_{DS}= -24\text{V}, T_A=25^{\circ}\text{C}$ )	$I_{DSS}$	—	—	-1 -5	$\mu\text{A}$
Gate Body Leakage ( $V_{GS}=\pm 20\text{V}, V_{DS}=0\text{V}$ )	$I_{GSS}$	—	—	$\pm 100$	nA
Static Drain-Source On-State Resistance ( $I_D = -4.1\text{A}, V_{GS}= -10\text{V}$ )	$R_{DS(ON)}$	—	55	65	$\text{m}\Omega$
Static Drain-Source On-State Resistance ( $I_D = -2\text{A}, V_{GS}= -4.5\text{V}$ )	$R_{DS(ON)}$	—	75	95	$\text{m}\Omega$
Input Capacitance ( $V_{GS}=0\text{V}, V_{DS}= -15\text{V}, f=1\text{MHz}$ )	$C_{ISS}$	—	260	—	pF
Output Capacitance ( $V_{GS}=0\text{V}, V_{DS}= -15\text{V}, f=1\text{MHz}$ )	$C_{OSS}$	—	37	—	pF
Turn-ON Time ( $V_{DS}= -15\text{V}, I_D = -10\text{ A}, R_{GEN}=6\Omega$ )	$t_{(on)}$	—	6	—	ns
Turn-OFF Time ( $V_{DS}= -15\text{V}, I_D = -10\text{ A}, R_{GEN}=6\Omega$ )	$t_{(off)}$	—	20	—	ns

**Notes :**

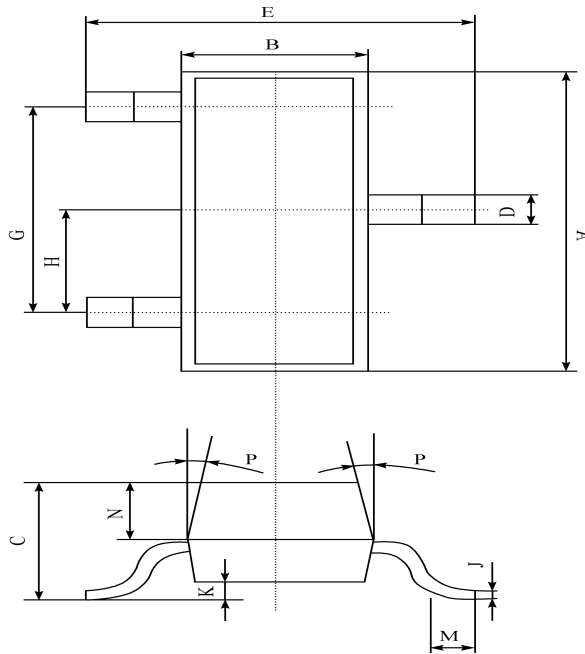
\*Pulse Test : Pulse Width  $\leq 300\mu\text{s}$ , Duty Cycle  $\leq 2\%$ .

» Typical Performance Characteristics ((T<sub>J</sub> = 25 °C, unless otherwise noted))



»Package Information

SOT-23



A	$2.90 \pm 0.10$
B	$1.30 \pm 0.10$
C	$1.00 \pm 0.10$
D	$0.40 \pm 0.10$
E	$2.40 \pm 0.20$
G	$1.90 \pm 0.10$
H	$0.95 \pm 0.05$
J	$0.13 \pm 0.05$
K	$0.00 - 0.10$
M	$\geq 0.2$
N	$0.60 \pm 0.10$
P	$7 \pm 2^\circ$

»Ordering information

Order code	Package	Marking	Base qty	Delivery mode
AO3407	SOT-23	3407	3K	Tape and reel