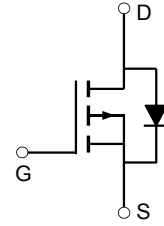


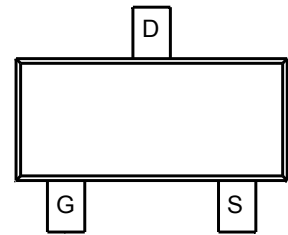
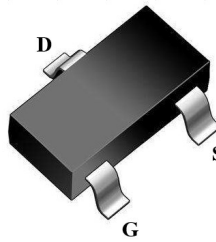
### FEATURES

- $R_{DS(on)}$  = Typ 42m $\Omega$  @  $V_{GS} = -10V$
- $R_{DS(on)}$  = Typ 62m $\Omega$  @  $V_{GS} = -4.5V$
- Pb-Free, RoHS Compliant
- Surface mount package
- channel switch with low  $R_{DS(on)}$
- Advanced trench technology



### APPLICATIONS

- Load/Power switch
- Interfacing, logic switching
- PWM applications
- DC/DC Converter



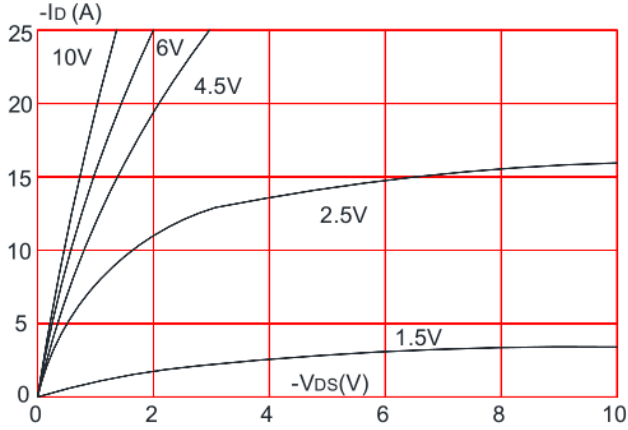
### ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Rating	Unit
Drain Source Voltage	$V_{DSS}$	-30	V
Gate-Source Voltage	$V_{GSS}$	$\pm 20$	V
Continuous Drain Current @25°C	$I_D$	-4.1	A
Continuous Drain Current @100°C		-2.7	
Pulsed Drain Current	$I_{DM}$	-16.4	A
Power Dissipation @25°C	$P_D$	1.51	W
Maximum Junction Temperature	$T_J$	150	°C
Storage Temperature	$T_S$	-50 to 150	°C
Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	83	°C/W

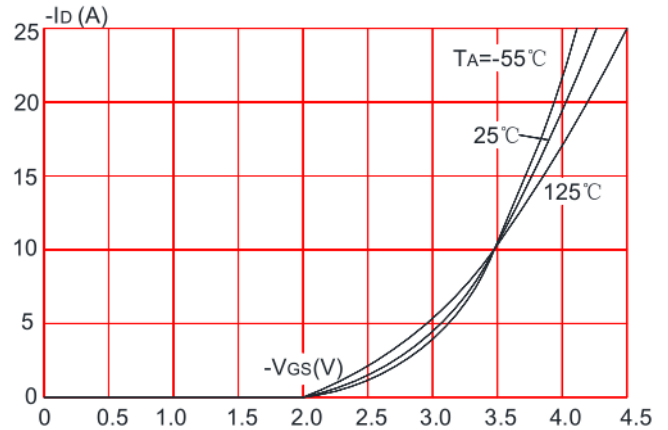
### ▼ ELECTRICAL CHARACTERISTICS<sub>(T<sub>A</sub>=25°C)</sub>

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
<b>OFF CHARACTERISTICS</b>						
Drain-Source Breakdown Voltage	B <sub>VDS</sub>	V <sub>GS</sub> = 0V, I <sub>D</sub> = -250μA	-30			V
Zero Gate Voltage Drain Current	I <sub>DSS</sub>	V <sub>DS</sub> = -30V, V <sub>GS</sub> = 0V			-1	μA
Gate-Source Leakage	I <sub>GSS</sub>	V <sub>GS</sub> = ±20V, V <sub>DS</sub> = 0V			±0.1	μA
<b>ON CHARACTERISTICS</b>						
Gate Threshold Voltage	V <sub>GS(th)</sub>	V <sub>DS</sub> = V <sub>GS</sub> , I <sub>D</sub> = -250μA	-1	-1.5	-2.5	V
Static Drain-Source On-Resistance	R <sub>DS(ON)</sub>	V <sub>GS</sub> = -10V, I <sub>D</sub> = -4A		42	55	mΩ
		V <sub>GS</sub> = -4.5V, I <sub>D</sub> = -3A		62	85	
<b>DRAIN-SOURCE DIODE CHARACTERISTICS</b>						
Diode Forward Voltage	V <sub>SD</sub>	V <sub>GS</sub> = 0V, I <sub>S</sub> = -4.1A		-0.8	-1.2	V
Source Drain Current	I <sub>SD</sub>	T <sub>A</sub> =25°C			-4.1	A
<b>DYNAMIC CHARACTERISTICS</b>						
Input Capacitance	C <sub>iss</sub>	V <sub>DS</sub> = -15V V <sub>GS</sub> = 0V, f = 1MHz		580		pF
Output Capacitance	C <sub>oss</sub>			98		pF
Reverse Transfer Capacitance	C <sub>rss</sub>			74		pF
Total Gate Charge	Q <sub>g</sub>	V <sub>DS</sub> = -15V I <sub>D</sub> = -4.1A V <sub>GS</sub> = -10V		6.8		nC
Gate-Source Charge	Q <sub>gs</sub>			1		nC
Gate-Drain Charge	Q <sub>gd</sub>			1.4		nC
<b>SWITCHING CHARACTERISTICS</b>						
Turn-On Delay Time	t <sub>D(on)</sub>	V <sub>DD</sub> = -15V V <sub>GS</sub> = -10V I <sub>D</sub> = -1A R <sub>G</sub> = 2.5Ω		14		nS
Turn-On Rise Time	t <sub>r</sub>			61		nS
Turn-Off Delay Time	t <sub>D(off)</sub>			19		nS
Turn-Off Fall Time	t <sub>f</sub>			10		nS

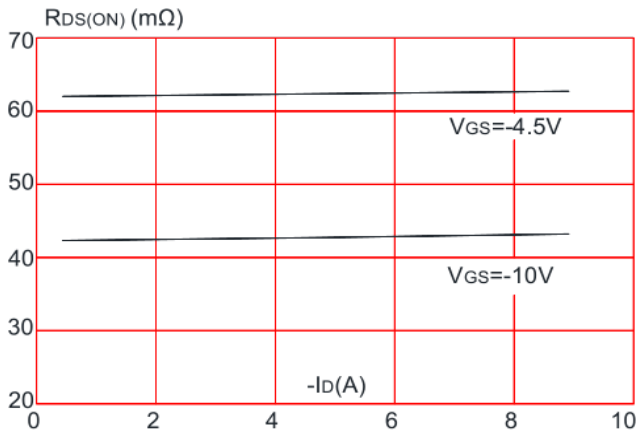
### PERFORMANCE CHARACTERISTICS



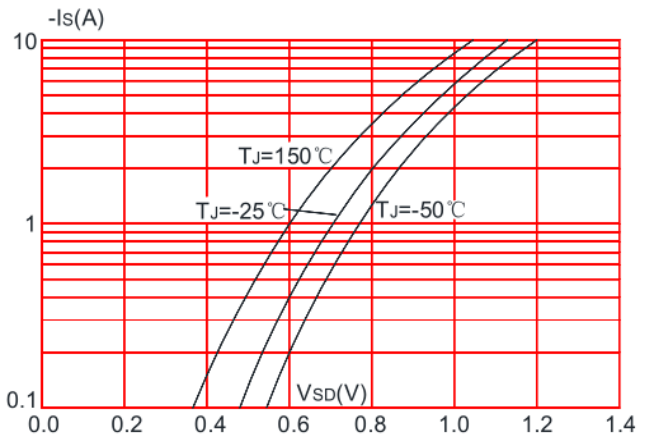
Output Characteristics



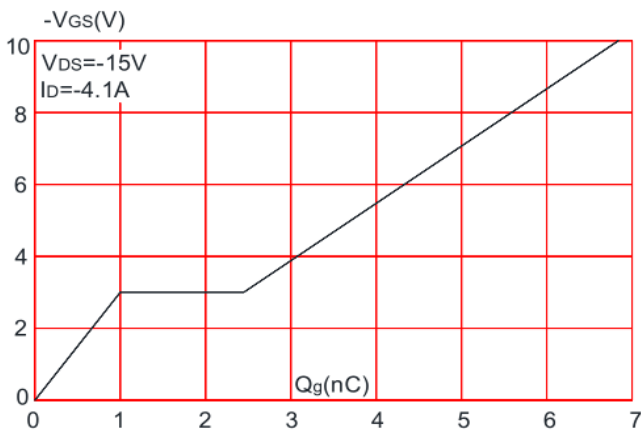
Typical Transfer Characteristics



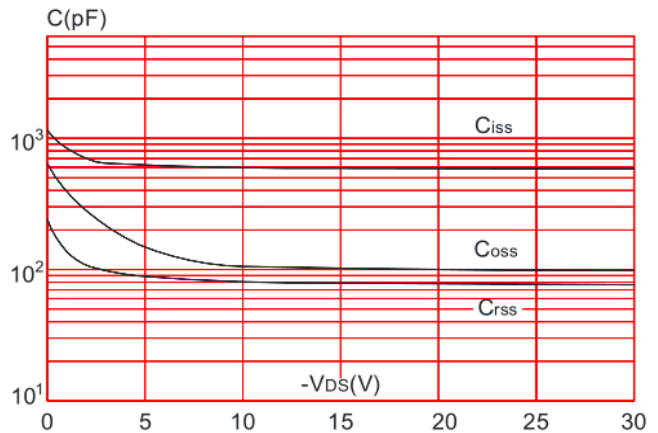
On-Resistance VS. Drain Current



Body Diode Characteristics

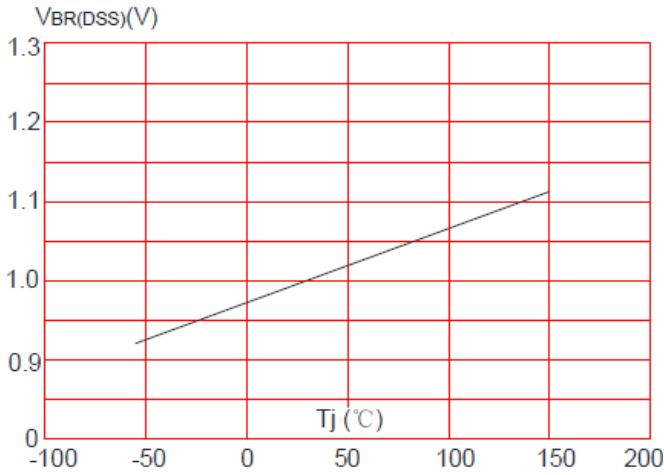


Gate Charge Characteristics

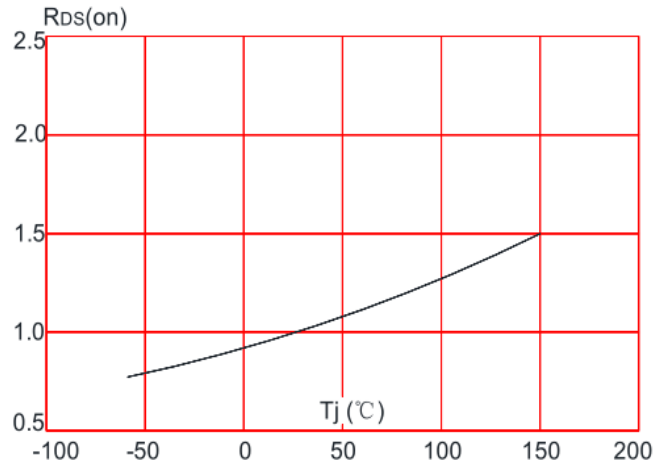


Capacitance Characteristics

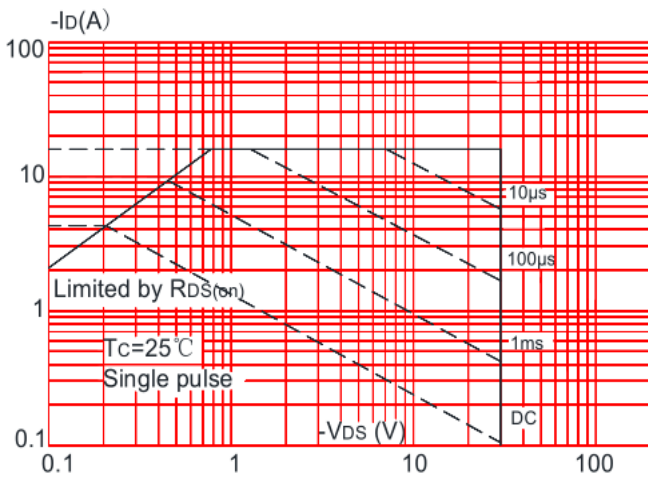
### PERFORMANCE CHARACTERISTICS(Continued)



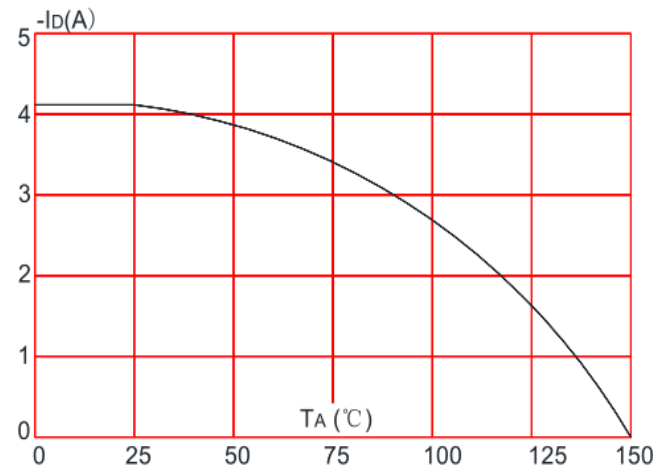
**Normalized Breakdown Voltage VS. Junction Temperature**



**Normalized on Resistance VS. Junction Temperature**



**Safe Operating Area**



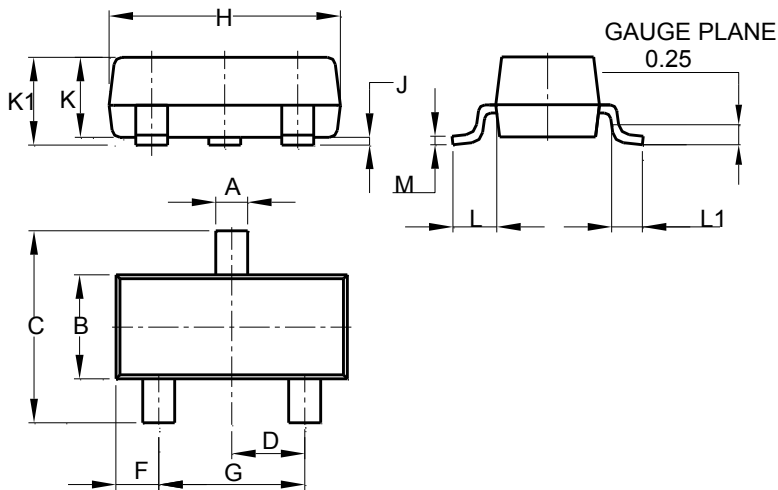
**Maximum Continuous Drain Current VS. Ambient Temperature**

### ORDERING INFORMATION

Standard Part NO.	Package	Packing	Min. Quantity
AMP3407A-AAA	SOT23	Tape & Reel	3000PCS

### PACKAGE INFORMATION

- SOT23



SOT23		
Dim	Min	Max
A	0.370	0.510
B	1.200	1.400
C	2.300	2.500
D	0.890	1.030
F	0.450	0.600
G	1.780	2.050
H	2.800	3.000
J	0.013	0.100
K	0.890	1.000
K1	0.930	1.100
L	0.450	0.610
L1	0.250	0.550
M	0.085	0.150
All Dimensions in mm		