Elektronische Bauelemente

SST3407J

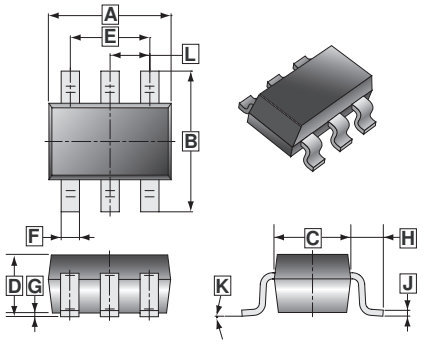
-4.1A , -30V , $R_{DS(ON)}$ 60 mΩ
P-Channel Enhancement Mode MOSFET

RoHS Compliant Product
A suffix of “-C” specifies halogen and lead-free

DESCRIPTION

SST3407J utilized advanced processing techniques to achieve the lowest possible on-resistance, extremely efficient and cost-effectiveness device. The SOT-26 package is universally used for all commercial-industrial applications.

SOT-26



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	2.70	3.10	G	0	0.10
B	2.60	3.00	H	0.60 REF.	
C	1.40	1.80	J	0.12 REF.	
D	1.30 MAX.		K	0°	10°
E	1.90 REF.		L	0.95 REF.	
F	0.30	0.50			

FEATURES

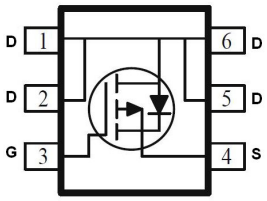
- Simple Drive Requirement
- Smaller Outline Package
- Surface mount package

MARKING

R7

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-26	3K	7 inch



ABSOLUTE MAXIMUM RATINGS (T_A=25℃ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	±20	V
Continuous Drain Current	I_D	-4.1	A
Power Dissipation	P_D	0.35	W
Maximum Junction to Ambient	$R_{\theta JA}$	357	℃ / W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	150, -55~150	℃

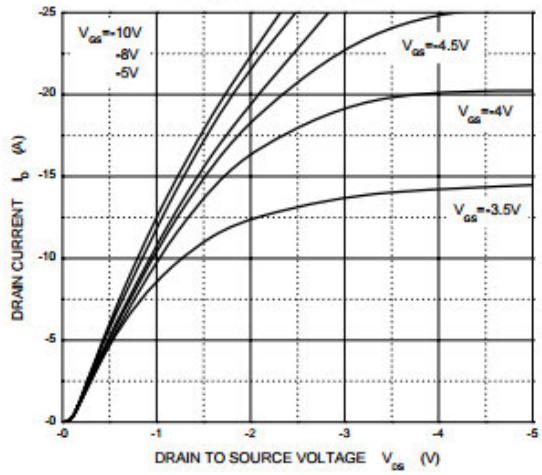
ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Static Characteristics						
Drain-Source Breakdown Voltage	BV_{DSS}	-30	-	-	V	V_{GS}=0, I_D= -250μA
Drain-Source Leakage Current	I_{DSS}	-	-	-1	μA	V_{DS}= -24V, V_{GS}=0
Gate-Body Leakage Current	I_{GSS}	-	-	±100	nA	V_{DS}=0V, V_{GS}=±20V
Drain-Source On-Resistance [1]	$R_{DS(ON)}$	-	-	60	mΩ	V_{GS}= -10V, I_D= -4.1A
		-	-	87		V_{GS}= -4.5V, I_D= -3A
Forward Transconductance [1]	g_{fs}	5.5	-	-	S	V_{DS}= -5V, I_D= -4A
Gate-Threshold Voltage	$V_{GS(th)}$	-1	-	-3	V	V_{DS}=V_{GS}, I_D= -250μA
Diode Forward Voltage [1]	V_{SD}	-	-	-1	V	I_S= -1A, V_{GS}= 0
Dynamic Characteristics [2]						
Input Capacitance	C_{iss}	-	700	-	pF	V_{GS}=0 V_{DS}= -15V, f=1.0MHz
Output Capacitance	C_{oss}	-	120	-		
Reverse Transfer Capacitance	C_{rss}	-	75	-		
Switching Characteristics [2]						
Turn-on Delay Time	$T_{d(on)}$	-	8.6	-	nS	V_{GS}= -10V, V_{DS}= -15V, R_{GEN}=3Ω, R_L=3.6Ω
Rise Time	T_r	-	5	-		
Turn-off Delay Time	$T_{d(off)}$	-	28.2	-		
Fall Time	T_f	-	13.5	-		

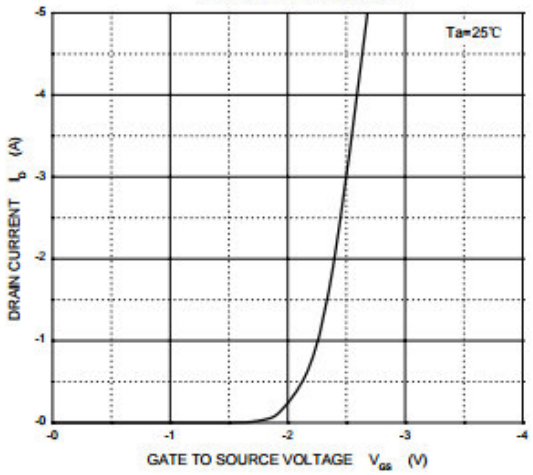
Notes:
1. Pulse Test : Pulse width≦300μs, duty cycle ≦2%.
2. These parameters have no way to verify.

CHARACTERISTIC CURVES

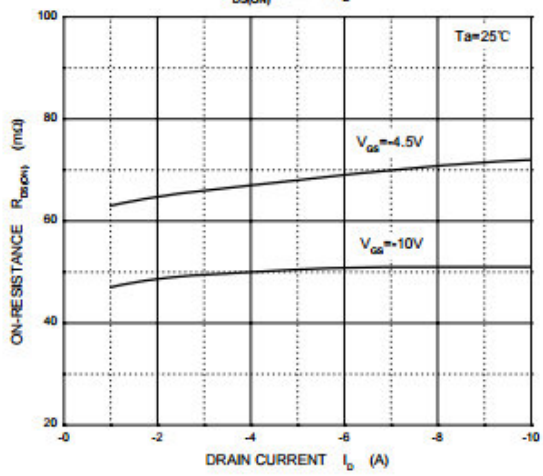
Output Characteristics



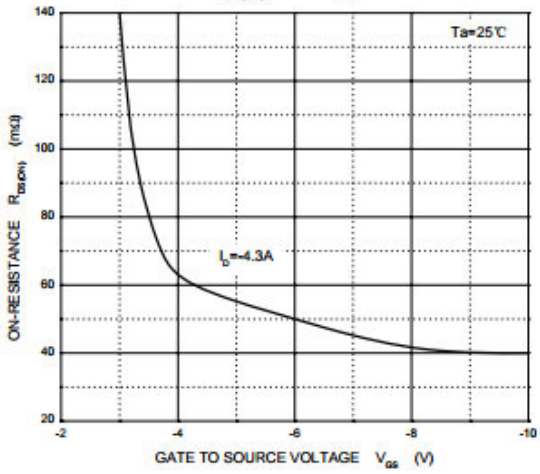
Transfer Characteristics



$R_{DS(ON)}$ — I_D



$R_{DS(ON)}$ — V_{GS}



I_S — V_{SD}