Elektronische Bauelemente

SUM84DW-C

-0.13A, -50V, $R_{DS(ON)}$ 10Ω

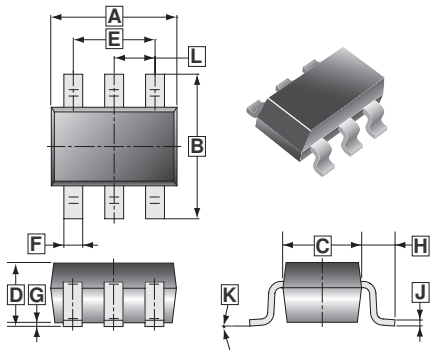
Dual P-Ch Enhancement Mode Power MOSFET

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Low On-Resistance
- High-Speed Switching
- Drive Circuits Can be Simple
- Parallel Use is Easy

SOT-363



APPLICATIONS

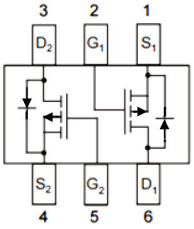
- P-Channel Enhancement Mode Effect Transistor
- Switching Application

MARKING

K84

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-363	3K	7 inch



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.80	2.20	G	0.100 REF.	
B	1.80	2.45	H	0.525 REF.	
C	1.15	1.35	J	0.08	0.25
D	0.80	1.10	K	8°	
E	1.10	1.50	L	0.650 TYP.	
F	0.10	0.35			

ORDER INFORMATION

Part Number	Type
SUM84DW-C	Lead (Pb)-free and Halogen-free

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

Parameter	Symbol	Ratings	Unit
Drain-Source Voltage	V_{DS}	-50	V
Gate-Source Voltage	V_{GS}	±12	V
Continuous Drain Current [1]	I_D	-0.13	A
Total Power Dissipation [1]	P_D	0.3	W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~150	℃
Thermal Data			
Thermal Resistance Junction-Ambient [1]	$R_{\theta JA}$	417	℃/W

ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Drain-Source Breakdown Voltage	BV_{DSS}	-50	-	-	V	V_{GS}=0, I_D= -250uA
Gate Threshold Voltage [2]	$V_{GS(th)}$	-0.8	-	-2	V	V_{DS}=V_{GS}, I_D= -1mA
Gate-Source Leakage Current	I_{GSS}	-	-	±10	nA	V_{GS}= ±12V
Drain-Source Leakage Current	I_{DSS}	-	-	-1	μA	V_{DS}= -50V, V_{GS}=0
Static Drain-Source On-Resistance [2]	$R_{DS(ON)}$	-	2.1	10	Ω	V_{GS}= -5V, I_D= -0.1A
Turn-on Delay Time	$T_{d(on)}$	-	6	-	nS	V_{DS}= -30V, V_{GS}= -10V I_D= -0.2A, R_G=25Ω R_L=150Ω
Turn-off Delay Time	$T_{d(off)}$	-	25	-		
Input Capacitance	C_{iss}	-	56	-	pF	V_{GS}=0 V_{DS}= -20V f=1MHz
Output Capacitance	C_{oss}	-	17	-		
Reverse Transfer Capacitance	C_{rss}	-	5	-		

Notes:

1. Surface Mounted on FR4 Board, t≤10 sec.
2. Pulse Test: Pulse Width≤300μs, Duty Cycle≤2%.

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CHARACTERISTIC CURVES

FIG 1.OUTPUT CHARACTERISTICS

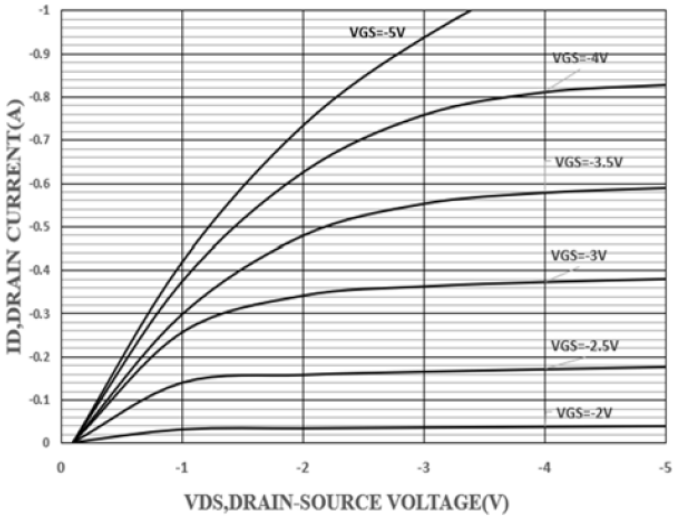

FIG 2.DRAIN-SOURCE ON RESISTANCE

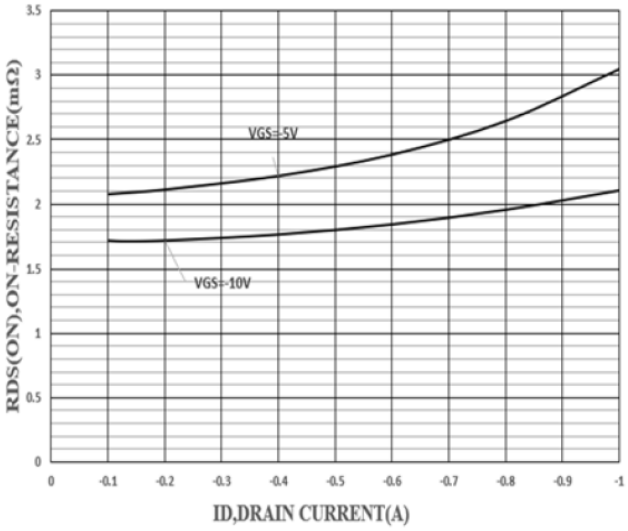

FIG 3.DRAIN-SOURCE ON RESISTANCE

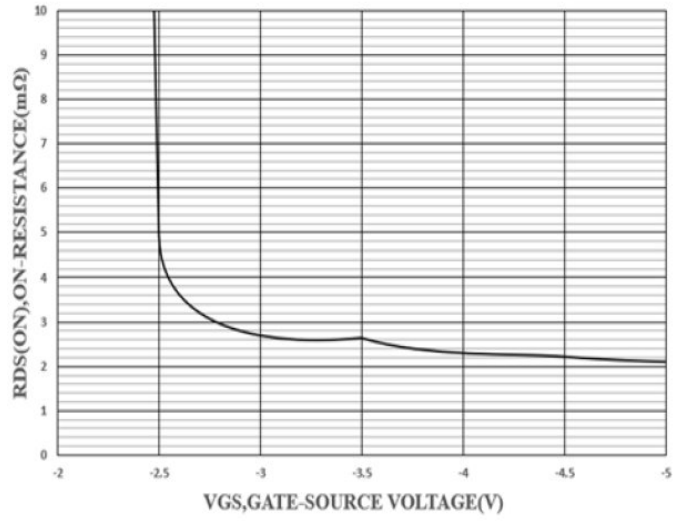

FIG 4.GATE THRESHOLD VOLTAGE

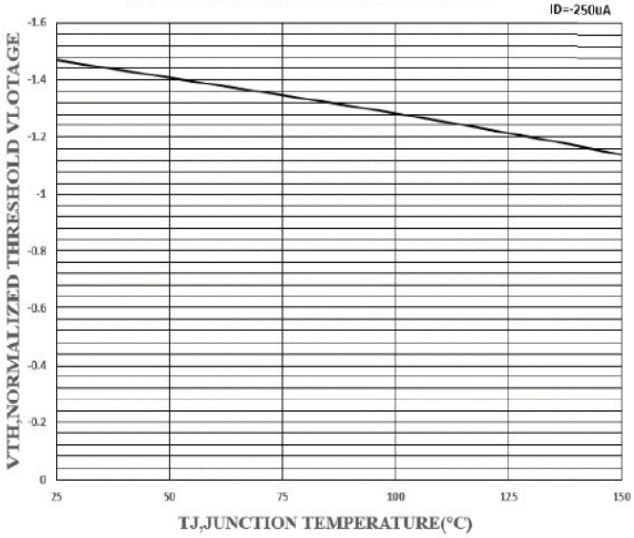

FIG 5.DRAIN-SOURCE ON RESISTANCE

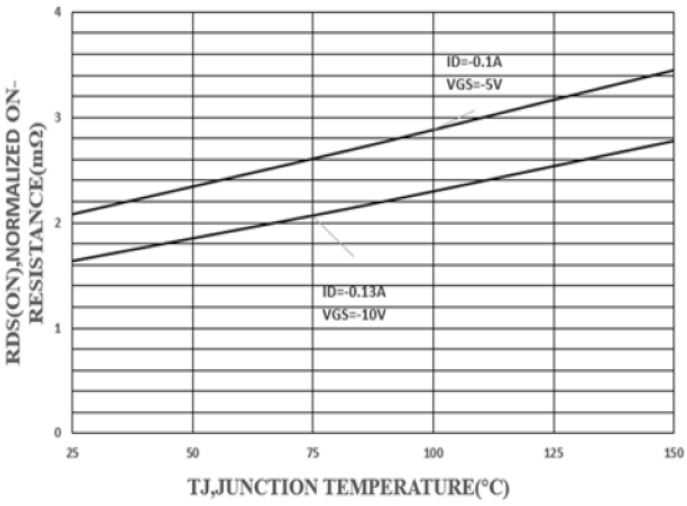

FIG 6.CAPACITANCE