

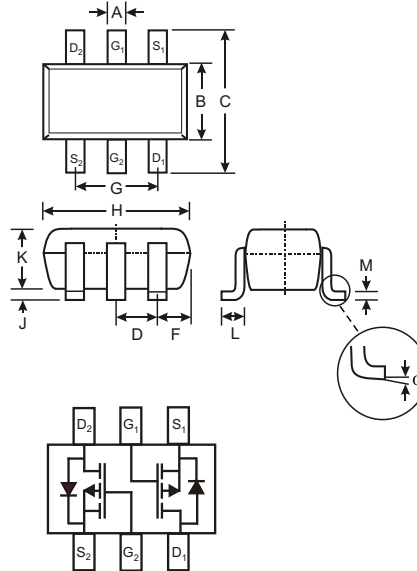
DUAL P-CHANNEL ENHANCEMENT MODE FIELD EFFECT TRANSISTOR

Features

- Low On-Resistance
- Low Gate Threshold Voltage
- Low Input Capacitance
- Fast Switching Speed
- Lead Free/RoHS Compliant (Note 3)

Mechanical Data

- Case: SOT-363
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020C
- Terminals: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Alloy 42 leadframe).
- Terminal Connections: See Diagram
- Marking Code (See Page 2): K84
- Ordering & Date Code Information: See Page 2
- Weight: 0.006 grams (approx.)



SOT-363		
Dim	Min	Max
A	0.10	0.30
B	1.15	1.35
C	2.00	2.20
D	0.65 Nominal	
F	0.30	0.40
H	1.80	2.20
J		0.10
K	0.90	1.00
L	0.25	0.40
M	0.10	0.25
	0°	8°
All Dimensions in mm		

Maximum Ratings @ T_A = 25 C unless otherwise specified

Characteristic	Symbol	Value	Units
Drain-Source Voltage	V _{DSS}	-50	V
Drain-Gate Voltage (Note 1)	V _{DGR}	-50	V
Gate-Source Voltage	V _{GS}	20	V
Drain Current (Note 2)	I _D	-130	mA
Total Power Dissipation (Note 2)	P _d	300	mW
Thermal Resistance, Junction to Ambient	R _{JA}	417	C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +150	C

- Note: 1. R_{GS} 20K .
 2. Device mounted on FR-4 PCB, 1 inch x 0.85 inch x 0.062 inch; pad layout as shown on Diodes Inc. suggested pad layout document AP02001, which can be found on our website at <http://www.diodes.com/datasheets/ap02001.pdf>.
 3. No purposefully added lead.

Electrical Characteristics @ T_A = 25 C unless otherwise specified

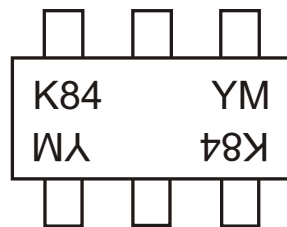
Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
OFF CHARACTERISTICS (Note 4)						
Drain-Source Breakdown Voltage	BV _{DSS}	-50	-75		V	V _{GS} = 0V, I _D = -250 A
Zero Gate Voltage Drain Current	I _{DSS}			-15 -60 -100	μA μA nA	V _{DS} = -50V, V _{GS} = 0V, T _J = 25 C V _{DS} = -50V, V _{GS} = 0V, T _J = 125 C V _{DS} = -25V, V _{GS} = 0V, T _J = 25 C
Gate-Body Leakage	I _{GSS}			10	nA	V _{GS} = 20V, V _{DS} = 0V
ON CHARACTERISTICS (Note 4)						
Gate Threshold Voltage	V _{GS(th)}	-0.8	-1.6	-2.0	V	V _{DS} = V _{GS} , I _D = -1mA
Static Drain-Source On-Resistance	R _{DS(ON)}		6	10		V _{GS} = -5V, I _D = -0.100A
Forward Transconductance	g _{FS}	0.05			S	V _{DS} = -25V, I _D = -0.1A
DYNAMIC CHARACTERISTICS						
Input Capacitance	C _{iss}			45	pF	V _{DS} = -25V, V _{GS} = 0V f = 1.0MHz
Output Capacitance	C _{oss}			25	pF	
Reverse Transfer Capacitance	C _{rss}			12	pF	
SWITCHING CHARACTERISTICS						
Turn-On Delay Time	t _{D(ON)}		10		ns	V _{DD} = -30V, I _D = -0.27A, R _{GEN} = 50 Ω, V _{GS} = -10V
Turn-Off Delay Time	t _{D(OFF)}		18		ns	

Ordering Information (Note 5)

Device	Packaging	Shipping
BSS84DW-7-F	SOT-363	3000/Tape & Reel

- Notes: 4. Short duration test pulse used to minimize self-heating effect.
5. For Packaging Details, go to our website at <http://www.diodes.com/datasheets/ap02007.pdf>.

Marking Information



K84 = Product Type Marking Code
YM = Date Code Marking
Y = Year ex: N = 2002
M = Month ex: 9 = September

Date Code Key

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Code	J	K	L	M	N	P	R	S	T	U	V	W
Month	Jan	Feb	March	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Code	1	2	3	4	5	6	7	8	9	O	N	D

查询"BSS84DW-7-F"供应商

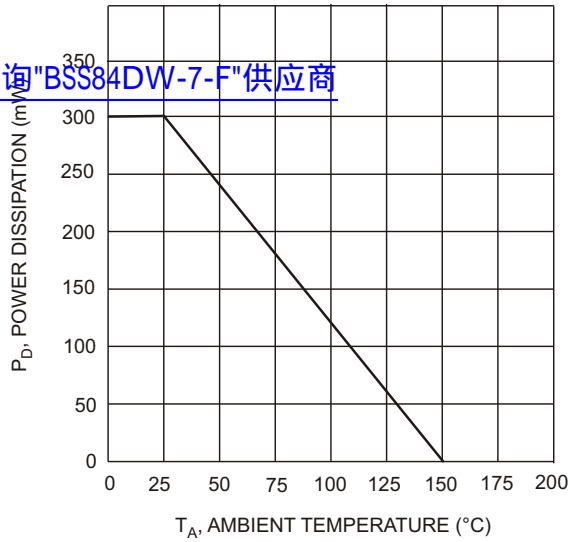


Fig. 1, Max Power Dissipation vs Ambient Temperature

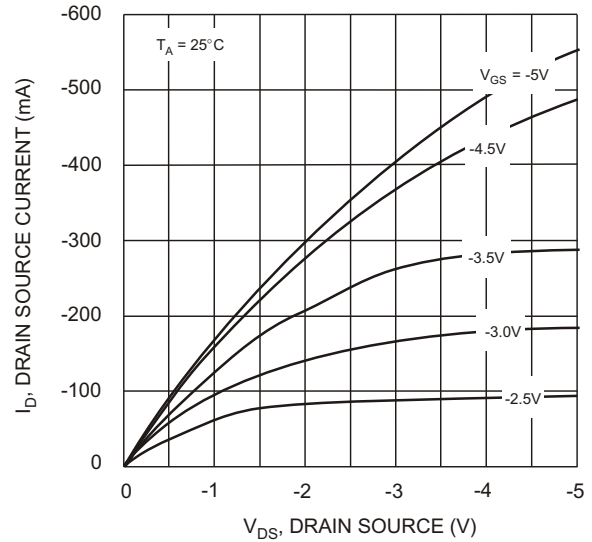


Fig. 2, Drain Source Current vs. Drain Source Voltage

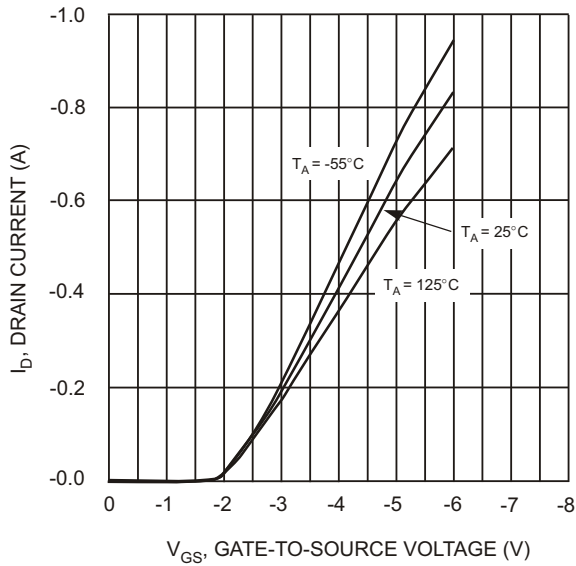


Fig. 3, Drain Current vs. Gate Source Voltage

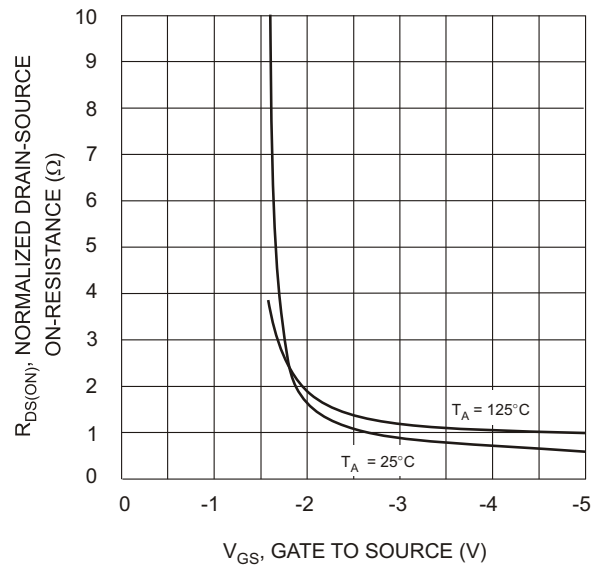


Fig. 4, On Resistance vs. Gate Source Voltage

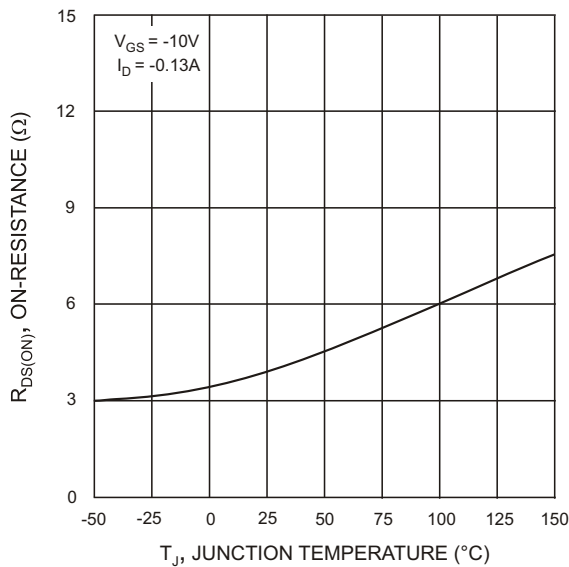


Fig. 5, On-Resistance vs. Junction Temperature

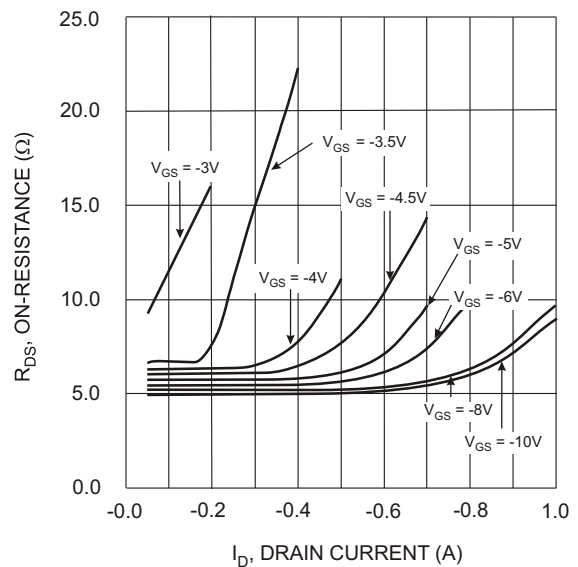


Fig. 6, On-Resistance vs. Drain Current

[查询"BSS84DW-7-F"供应商](#)

IMPORTANT NOTICE

Diodes, Inc. and its subsidiaries reserve the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. Diodes, Inc. does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold Diodes Incorporated and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

The products located on our website at www.diodes.com are not recommended for use in life support systems where a failure or malfunction of the component may directly threaten life or cause injury without the express written approval of Diodes Incorporated.