



Description

JM P-channel MOSFET

Features

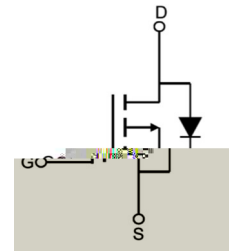
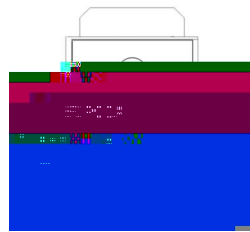
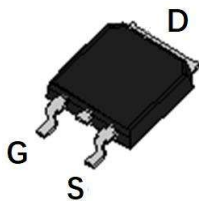
- J_{SG} 1.85W 1.85W
- F_{SG} 0.1A 4 J; g 1.0 J
- F_{SG} 0.1A 4 J; g 1.0 J
- < I \ DckYfUbX7i fYh k UbXh 7UdM]h
- @UX: fYDfX Vlg5W fYX
- G fLWAci hDUW]Y

Application

- DKA 5d]M]chg
- @UXGk]W



100% UIS TESTED
100% Vds TESTED



HC!& 88D5? Hcdj]k AUf_h UbXdp5gg] ba Yhh GWYa U]M]U] fu

Package Marking and Ordering Information

Device Marking	Device	OUTLINE	Device Package	Reel Size	Reel (PCS)	Per Carton (PCS)
>AH) SD685	>AH) SD685	H5DB;	HC!&&	%]bW	& 88	& 888

Absolute Maximum Ratings H18 °C i bYgg'ch MkgYg d]M]X

Symbol	Parameter	Max	Units
J _{SG}	8fUp]Gci fWJc]U]Y	!88	J
J; cc	; UEGci fWJc]U]Y	-%&	J
-8	7cb]bi ci g8fUp'7i fYh	H 1.8 °C	! * \$
		H 1.88 °C	! -
-8A	Di `gX8fUp'7i fYh]h	!& \$	5
D ₈	DckYf8]ggdU]cb	H 1.8 °C	+ \$
F >7	H Yfa UfYg]U]bWZ>i b]M]cb]k 5a V]h	& %	°C #K
HZH ₁	CdM]U] UbXG]cfU] YH]a d]M]U]fYU]Y	!) 1e Z%)	°C



Electrical Characteristics $T_H = 25^\circ C$ $V_{DD} = 5V$ $V_{SS} = 0V$

Symbol	Parameter	Test Condition	Min	Typ	Max	Units
Off Characteristics						
I_{DD1}	Supply Current	$V_{DD} = 5V, I_{IN} = 0$	0	1	1	μA
I_{DD2}	Supply Current	$V_{DD} = 5V, I_{IN} = 10 \mu A$	0	1	1	μA
I_{DD3}	Supply Current	$V_{DD} = 5V, I_{IN} = 10 \mu A, V_{OL} = 0.1V$	0	1	1	μA
On Characteristics						
I_{OH}	Output Current	$V_{DD} = 5V, V_{OL} = 0.1V$	0	1	1	μA
F_{SCL}	SCL Frequency	$V_{DD} = 5V, I_{IN} = 10 \mu A$	0	1	1	μA
		$V_{DD} = 5V, I_{IN} = 10 \mu A, V_{OL} = 0.1V$	0	1	1	μA
Dynamic Characteristics						
t_{LH}	Propagation Delay	$V_{DD} = 5V, I_{IN} = 10 \mu A, V_{OL} = 0.1V$	0	1	1	μs
t_{LH}	Propagation Delay		0	1	1	μs
t_{LH}	Propagation Delay		0	1	1	μs
E_{LH}	Power Dissipation	$V_{DD} = 5V, I_{IN} = 10 \mu A$	0	1	1	μW
E_{LH}	Power Dissipation		0	1	1	μW
E_{LH}	Power Dissipation		0	1	1	μW
Switching Characteristics						
t_{RHL}	Rise Time	$V_{DD} = 5V, I_{IN} = 10 \mu A, V_{OL} = 0.1V$	0	1	1	μs
t_{R}	Rise Time		0	1	1	μs
t_{RHL}	Rise Time		0	1	1	μs
t_{R}	Rise Time		0	1	1	μs
Drain/Source Diode Characteristics and Maximum Ratings						
I_{SM}	Maximum Sourcing Current	$V_{DD} = 5V, I_{IN} = 10 \mu A$	0	1	1	μA
I_{SM}	Maximum Sourcing Current	$V_{DD} = 5V, I_{IN} = 10 \mu A, V_{OL} = 0.1V$	0	1	1	μA
J_{CS}	Storage Current	$V_{DD} = 5V, I_{IN} = 10 \mu A$	0	1	1	μA
I_{EF}	Emitter Current	$T_H = 25^\circ C, I_{IN} = 10 \mu A$	0	1	1	μA
I_{EF}	Emitter Current		0	1	1	μA

Notes: 1. All test conditions are at $T_H = 25^\circ C$ unless otherwise specified.
 2. I_{DD1} and I_{DD2} are measured with the input signal at 0V.
 3. I_{DD3} is measured with the input signal at 10V and the output signal at 0.1V.
 4. I_{OH} is measured with the input signal at 10V and the output signal at 0.1V.
 5. F_{SCL} is measured with the input signal at 10V and the output signal at 0.1V.
 6. t_{LH} is measured with the input signal at 10V and the output signal at 0.1V.
 7. E_{LH} is measured with the input signal at 10V and the output signal at 0.1V.
 8. t_{RHL} is measured with the input signal at 10V and the output signal at 0.1V.
 9. t_{R} is measured with the input signal at 10V and the output signal at 0.1V.
 10. I_{SM} is measured with the input signal at 10V and the output signal at 0.1V.
 11. J_{CS} is measured with the input signal at 10V and the output signal at 0.1V.
 12. I_{EF} is measured with the input signal at 10V and the output signal at 0.1V.



Typical Performance Characteristics

Figure 1: Typical Performance Characteristics

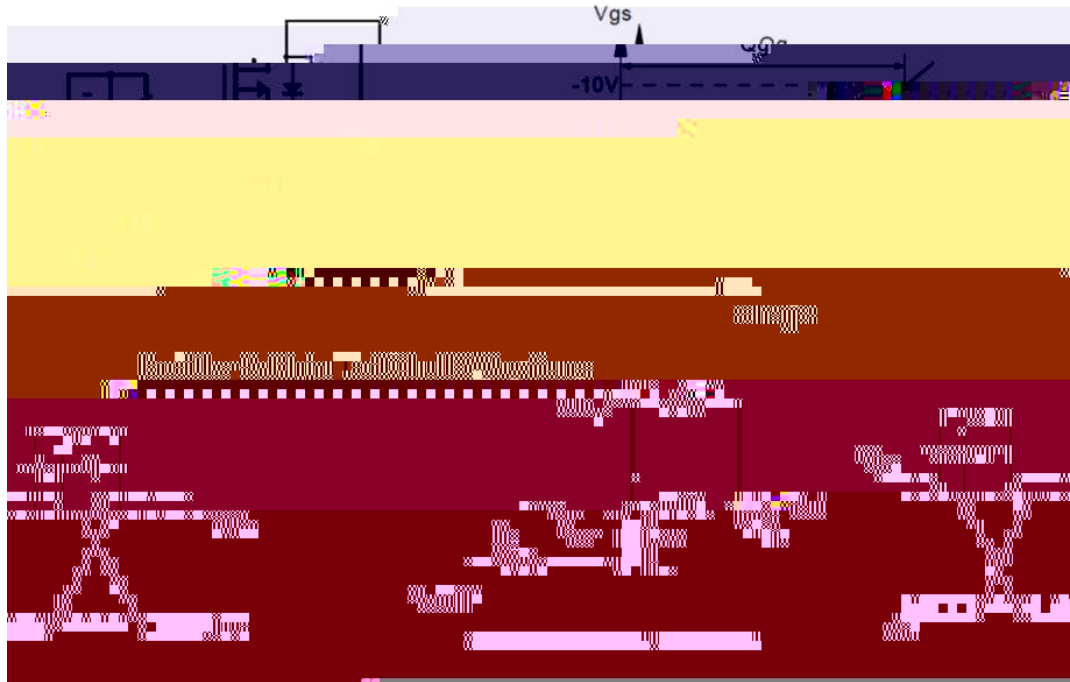
① J

!JscfLL

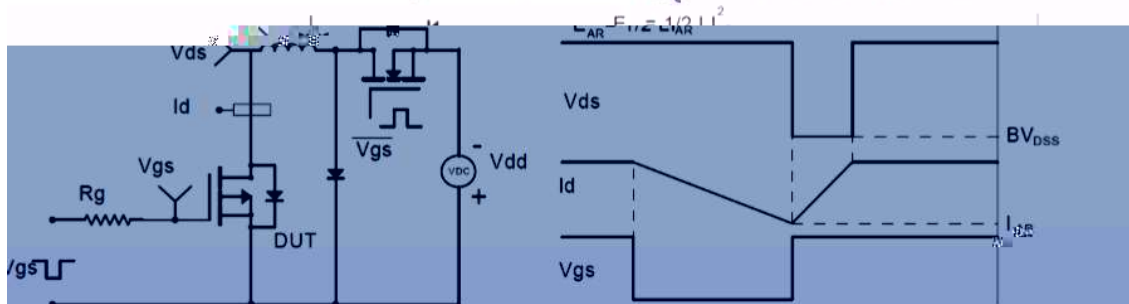
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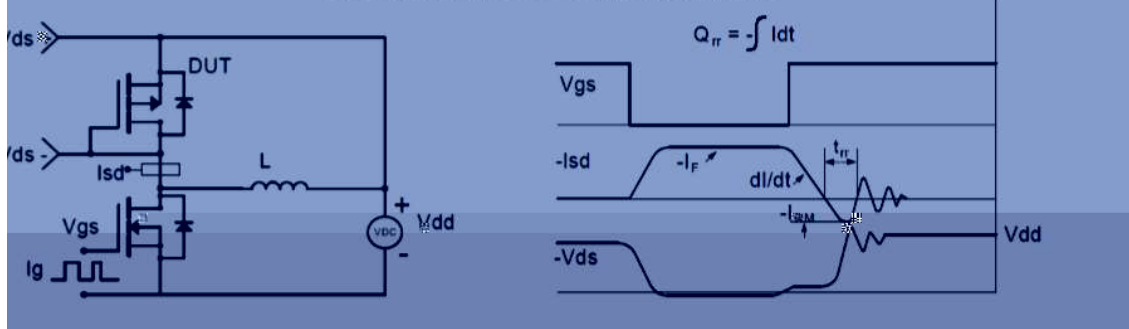
Gate Charge Test Circuit & Waveform



Unclamped Inductive Switching (UIS) Test Circuit & Waveforms



Diode Recovery Test Circuit & Waveforms



Package Mechanical Data

