Product Specification Type Number : M T M 7 6 1 1 0 0 [L] B F *5	Prepared by S.Miyata	Checked by M.Fujisawa	Applied by H.Shidooka	Established by K.Komichi

Type	Silicon Field Effect Transistors		
Application	Switching		
Structure	P-Channel MOS Type		
Outline	WSMini6-F1-B	Marking	9D

Absolute Maximum Ratings	VDSS	VGSS	ID	*2 IDp	*1 PD	Tch	Tstg
	-12	±8	-4.0	-16	700	150	-55 to +150
	(V)	(V)	(A)	(A)	(mW)	(°C)	(°C)

Electrical characteristics (Ta = 25 °C ±3 °C)

Item	Symbol	Measuring condition	Limit min.	Limit typ.	Limit max.	Unit
Drain-Source Voltage	VDSS	ID = -1 mA, VGS = 0 V	-12			V
Drain-Source Cutoff Current	IDSS	VDS = -12 V, VGS = 0 V			-1.0	μA
Gate-Source Cutoff Current	IGSS	VGS = ±6.4 V, VDS = 0 V			±10	μA
Gate Threshold Voltage	Vth	ID = -1.0 mA, VDS = -6.0 V	-0.3	-0.65	-1.0	V
Drain Resistance (ON)	RDS(ON) *3	ID = -1 A, VGS = -4.0 V		30	42	mΩ
Drain Resistance (ON)	RDS(ON) *3	ID = -0.5 A, VGS = -2.5 V		35	55	mΩ
Drain Resistance (ON)	RDS(ON) *3	ID = -0.2 A, VGS = -1.8 V		45	75	mΩ
Forward Transfer Admittance	|Yfs| *3	ID = -1.0 A, VDS = -10 V, f = 1 kHz	3.5			S
Small-Signal Short-Circuit Imput Capacitance	Ciss	VDS = -10 V, VGS = 0, f = 1 MHz		1200		pF
Small-Signal Short-Circuit Output Capacitance	Coss	VDS = -10 V, VGS = 0, f = 1 MHz		110		pF
Small-Signal Reverse Transfer Capacitance	Crss	VDS = -10 V, VGS = 0, f = 1 MHz		110		pF
Turn-on Time	ton *4	VDD = -6 V, VGS = 0 to -4 V, ID = -1 A		30		ns
Turn-off Time	toff *4	VDD = -6 V, VGS = -4 to 0 V, ID = -1 A		300		ns

Note: Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

*1 Measuring on Ceramic substrate at 40×38×0.1mm.
Absolute maximum rating PD without heat sink shall be made 150mW.

*2 Pulse Width ≦10μs, Duty Cycle ≦1%

*3 Pulse Test:Pulse Width <300μs, Duty Cycle <2.0%

*4 Refer to the test circuit

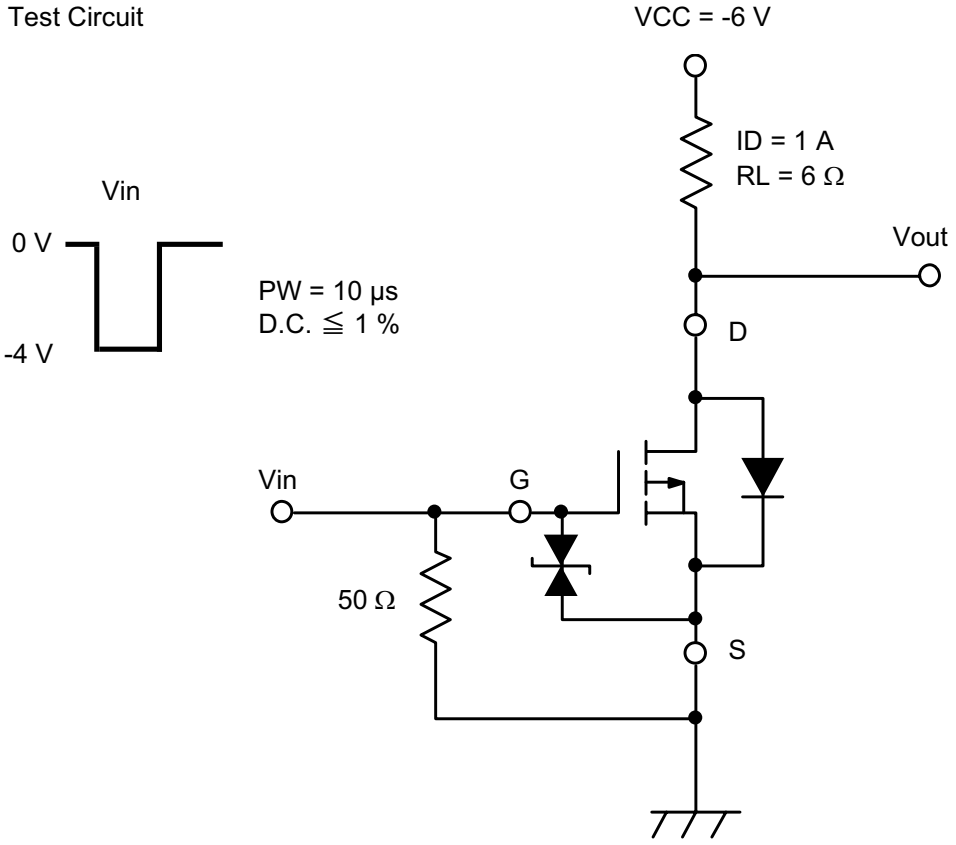
*5 Packing

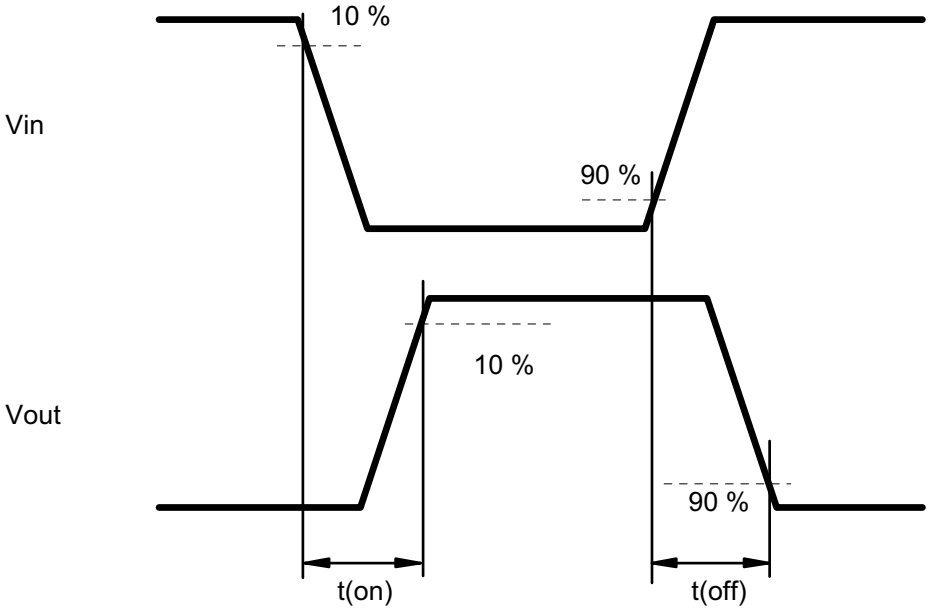
Embossed Type (Thermo-compression sealing)

2007.11.07	
Established	Revised

Product Specification
Type Number : M T M 7 6 1 1 0 0 L B F
*5

Test Circuit

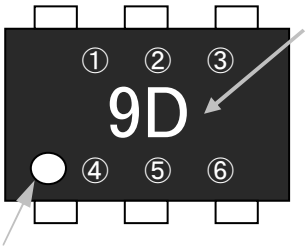




2007.11.07	
Established	Revised

Product Specification
Mark Indication
Type Number : M T M 7 6 1 1 0 0 L B F
*5

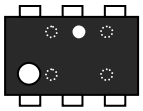
Mark layout

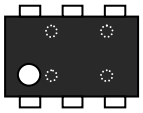


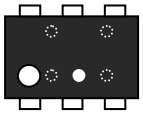
Indication of No.1 lead

①③④⑥ : Indication of produced month
②⑤ : Display position of beginning/middle /late month indication

《②⑤ : Example of indication of beginning / middle / late month indication》

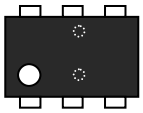

【 Beginning】

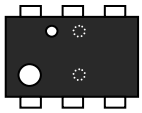

【 Middle】

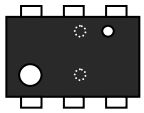

【 Late】

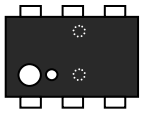
The actual font of product symbol may differ slightly from the font shown in this specification.

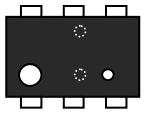
《 Example of indication of produced month》

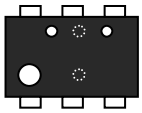

【Jan.】

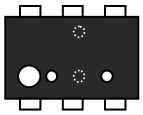

【 Feb.】

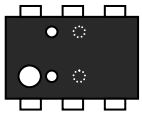

【 Mar.】

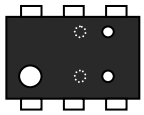

【 Apr.】

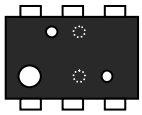

【 May】

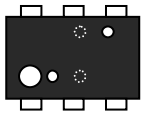

【 Jun.】

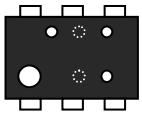

【Jul.】


【 Aug.】

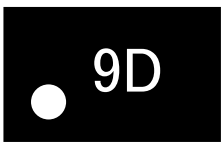

【 Sep.】


【Oct.】


【 Nov.】

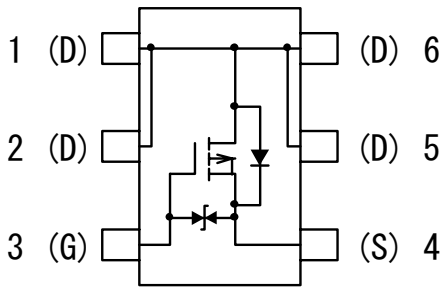

【 Dec.】

・ Factory distinction mark

Factory	JAPAN		
Package code	WSMini6 - F1 - B		
Marking	No indication 		

※ White parts are treated by laser mark.

Lead No	Connection
1.	Drain
2.	Drain
3.	Gate
4.	Source
5.	Drain
6.	Drain



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Established	Revised