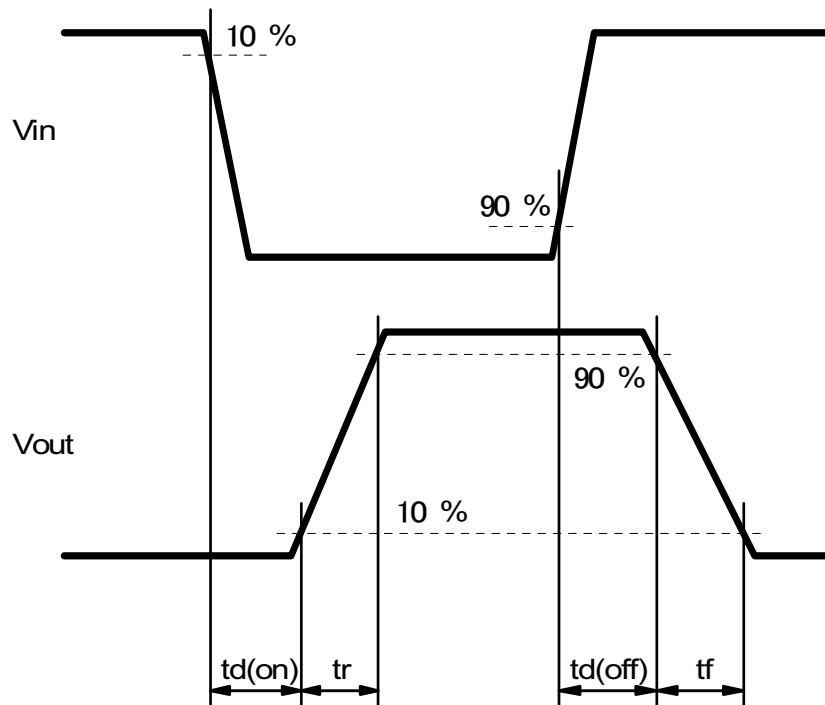
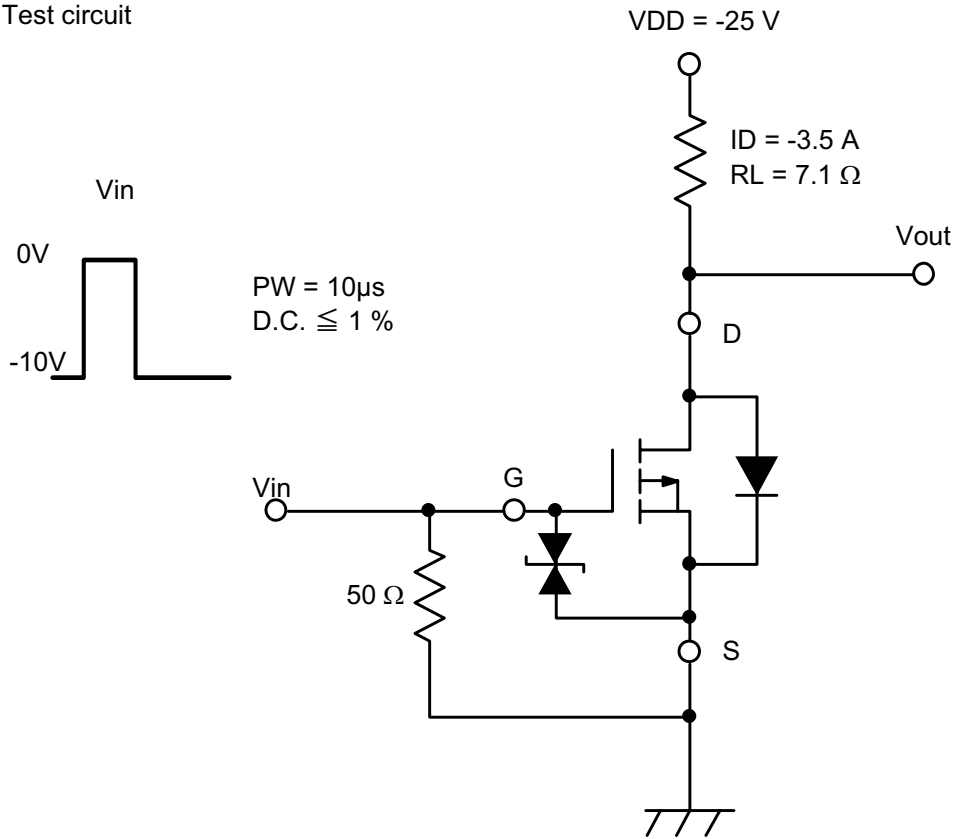


Product Specification Type Number : M T M 9 8 1 4 0 0 <span style="border: 1px solid black; padding: 0 2px;">B</span> B F *1				Prepared by S.Miyata	Checked by M.Fujisawa	Applied by H.Shidooka	Established by K.Kemichi
Type	Silicon Field Effect Transistors						
Application	Switching						
Structure	P-Channel MOS Type						
Outline	SO8-F1-B				Marking		BA
Absolute Maximum Ratings	VDSS	VGSS	ID	IDp	PD <sup>*2</sup>	Tch	Tstg
	-40	±20	-7	-28	2	150	-55 to +150
	(V)	(V)	(A)	(A)	(W)	(°C)	(°C)
Electrical characteristics (Ta = 25 °C ±3 °C)							
Item	Symbol	Measuring condition	Limit			Unit	
			min.	typ.	max.		
Drain-Source Voltage	VDSS	ID = -1 mA, VGS = 0 V	-40			V	
Drain-Source Cutoff Current	IDSS	VDS = -40 V, VGS = 0 V			-10	μA	
Gate-Source Cutoff Current	IGSS	VGS = ±16 V, VDS = 0 V			±10	μA	
Gate Threshold Voltage	Vth	ID = -1.0 mA, VDS = -10.0 V	-1.0		-2.5	V	
Drain Resistance (ON)	<sup>*3</sup> RDS(ON)	ID = -7 A, VGS = -10 V		19	25	mΩ	
Drain Resistance (ON)	<sup>*3</sup> RDS(ON)	ID = -3.5A, VGS = -4.5V		28	45	mΩ	
Forward Transfer Admittance	<sup>*3</sup>  Yfs	ID = -7 A, VDS = -10 V	10			S	
Small-Signal Short-Circuit Input Capacitance	Ciss	VDS = -10 V, VGS = 0 V, f = 1MHz		2700		pF	
Small-Signal Short-Circuit Output Capacitance	Coss	VDS = -10V, VGS = 0V, f = 1MHz		190		pF	
Small-Signal Reverse Transfer Capacitance	Crss	VDS = -10 V, VGS = 0 V, f = 1 MHz		175		pF	
Turn-on Delay Time	<sup>*3,4</sup> td(on)	VDD = -25 V, VGS = 0 to -10 V, ID = -3.5 A		18		ns	
Rise Time	<sup>*3,4</sup> tr	VDD = -25 V, VGS = 0 to -10 V, ID = -3.5 A		15		ns	
Turn-off Delay Time	<sup>*3,4</sup> td(off)	VDD = -25 V, VGS = -10 to 0 V, ID = -3.5 A		230		ns	
Fall Time	<sup>*3,4</sup> tf	VDD = -25 V, VGS = -10 to 0 V, ID = -3.5 A		70		ns	
<p>Note: Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.</p> <p>*1 Packing Embossed type (thermo-compressioon sealing)</p> <p>*2 Measuring on ceramic board at 50×50×1.0mm.</p> <p>*3 Pulse test</p> <p>*4 See test circuit</p> <p style="text-align: center;">Internally connected circuit</p> <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 20px;"> <p>1.Source</p> <p>2.Source</p> <p>3.Source</p> <p>4.Gate</p> <p>5.Drain</p> <p>6.Drain</p> <p>7.Drain</p> <p>8.Drain</p> </div> </div>							
2008.01.31							
Established	Revised						

Product Specification  
 Type Number : M T M 9 8 1 4 0 0 B B F  
 \*1

Test circuit



2008.01.31

Established

Revised