imall

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MTM684110LBF

Dual P-channel MOSFET

MOS FET MTM684110LBF

Unit: mm

0.16

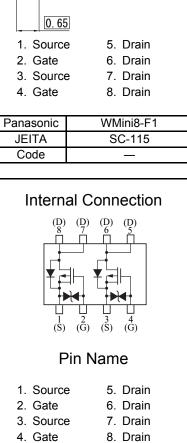
2.9 For switching 0.3 Features 4 ∞ · Low drain-source On-state Resistance ri ci RDS(on) typ. = 23 m Ω (VGS =-5.0 V) · Low drive voltage:1.8V drive ₽₁ Halogen-free / RoHS compliant Ę. Ļ 1 3 (0.81) 4 (EU RoHS / UL-94 V-0 / MSL:Level 1 compliant) 0.65 Marking Symbol 1D 1. Source 2. Gate Basic Part Number: Dual MTM76111 (Individual) 3. Source

Packaging

Embossed type (Thermo-compression sealing) 3 000 pcs / reel (standard)

■ Absolute Maximum Ratings Ta = 25 °C									
Parameter		Symbol	Rating	Unit					
	Drain-source Voltage	VDS	-12	V					
	Gate-source Voltage	VGS	±8	V					
	Drain current	ID	-4.8	Α					
	Peak drain current	IDp	-19	Α					
Overall	Total power dissipation ^{*1}	PD	1.0	W					
	Channel temperature	Tch	150	°C					
	Operating ambient temperature	Topr	-40 to +85	°C					
	Storage temperature	Tstg	-55 to +150	°C					

Note) *1 Glass epoxy board: 25.4 mm × 25.4 mm × 0.8 mm Copper foil of the drain portion should have a area of 300 mm² or more PD absolute maximum rating without a heat shink: 400 mW





MOS FET MTM684110LBF

■ Electrical Characteristics Ta = 25°C ± 3°C

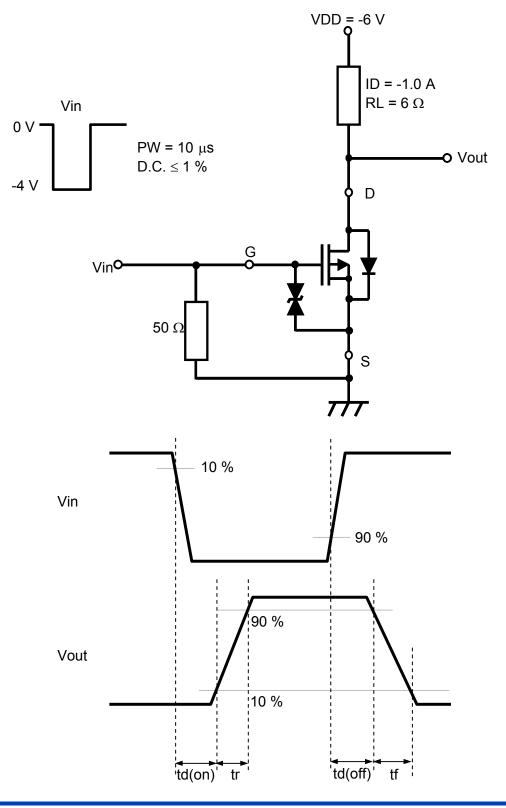
Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Drain-source surrender voltage	VDSS	ID = -1 mA, VGS = 0	-12			V
Drain-source cutoff current	IDSS	VDS = -10 V, VGS = 0			-0.1	μA
Gate-source cutoff current	IGSS	VGS = ±8 V, VDS = 0			±10	μA
Gate threshold voltage	Vth	ID = -1.0 mA, VDS = -6.0 V	-0.3	-0.65	-1.0	V
	RDS(ON)1	ID = -1.0 A, VGS = -5.0 V		23	32	mΩ
Drain-source ON resistance	RDS(ON)2	ID = -0.5 A, VGS = -2.5 V		27	40	mΩ
	RDS(ON)3	ID = -0.2 A, VGS = -1.8 V		36	60	mΩ
Forward transfer admittance	Yfs	ID = -1.0 A, VDS = -10 V	3.5			S
Short-circuit input capacitance (Common source)	Short-circuit input capacitance (Common source) Ciss			1400		рF
Short-circuit output capacitance (Common source)	Coss	VDS = -10 V, VGS = 0, f = 1 MHz		135		pF
Reverse transfer capacitance (Common source)	Crss			150		pF
Turn-on delay time ^{*1}	td(on)	VDD = -6 V, VGS = 0 V to -4 V		9		ns
Rise time ^{*1}	tr	ID = -1.0 A		11		ns
Turn-off delay time ^{*1}	td(off)	VDD = -6 V, VGS = -4 V to 0 V		270		ns
Fall time *1	tf	ID = -1.0 A		160		ns

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 Measuring methods for transistors.

2. *1 Measurement circuit for Turn-on Delay Time/Rise Time/Turn-off Delay Time/Fall Time



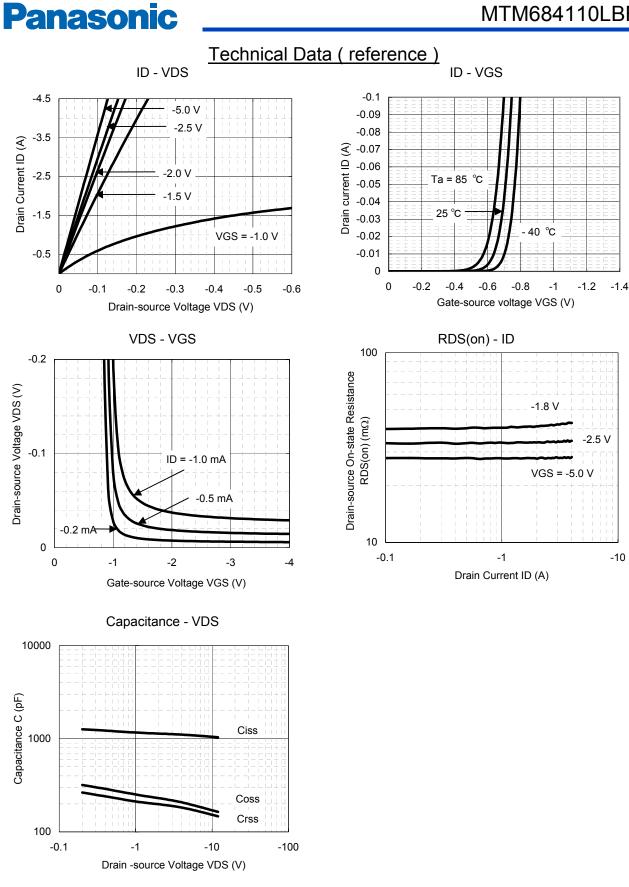
*2 Measurement circuit for Turn-on Delay Time/Rise Time/Turn-off Delay Time/Fall Time

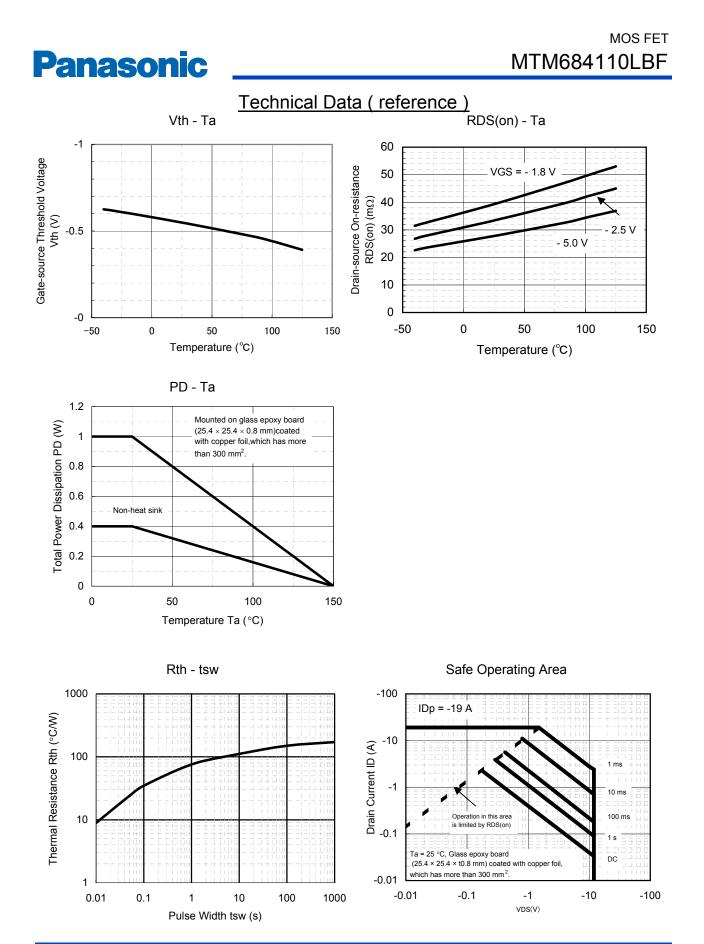


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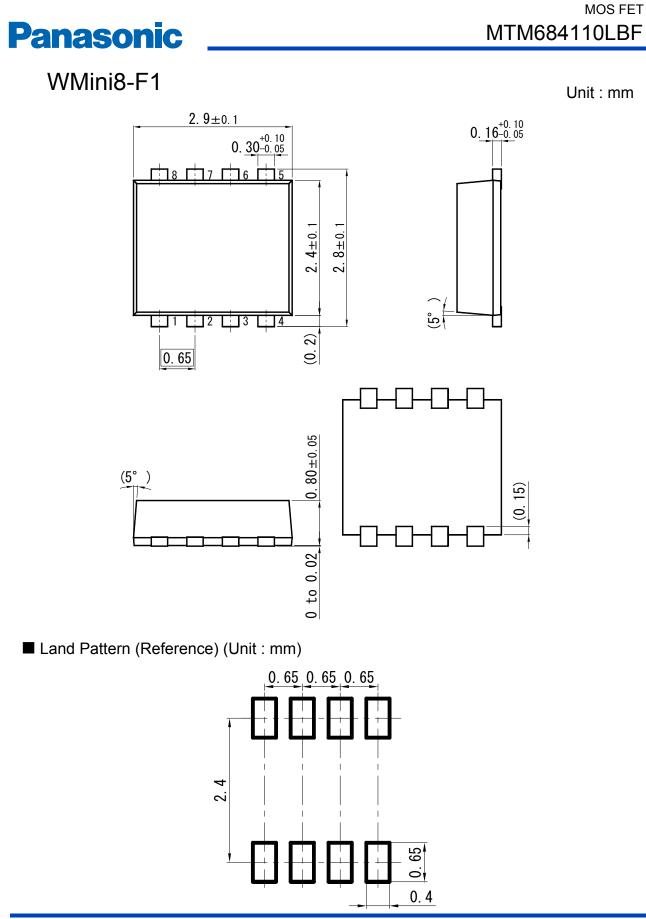








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