

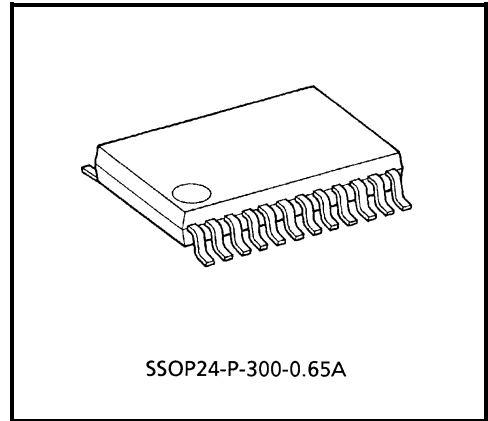
TD62M4503AFN

POWER MOS FET 4CH SINK DRIVER

TD62M4503AFN is 1CHIP 4ch FET Sink Driver built in Discrete Power MOS FET (2SK1078) × 4 and Diodes (1SS184).

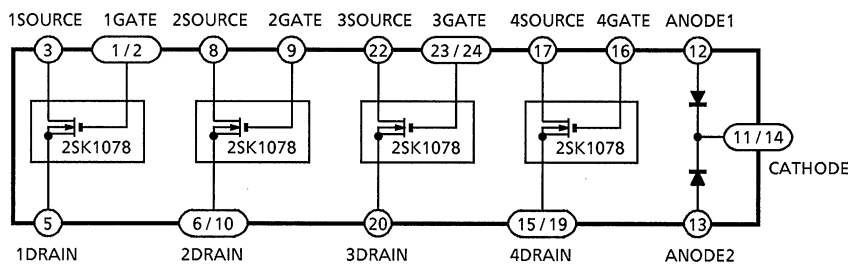
FEATURES

- 4V Drive
- Low ON Resistance : $R_{DS(ON)} = 0.58 \Omega$ (Typ.)
- Low Leakage Current
 - : $I_{GSS} = \pm 3 \mu A$ (Max.) ($V_{GS} = \pm 16 V$)
 - : $I_{GSS} = 100 \mu A$ (Max.) ($V_{GS} = 60 V$)
- Enhancement Type
 - : $V_{th} = 0.8 \sim 2.0 V$ ($V_{DS} = 10 V, I_D = 1 mA$)
- Small Package : SSOP 24 (0.65 mm Pitch)

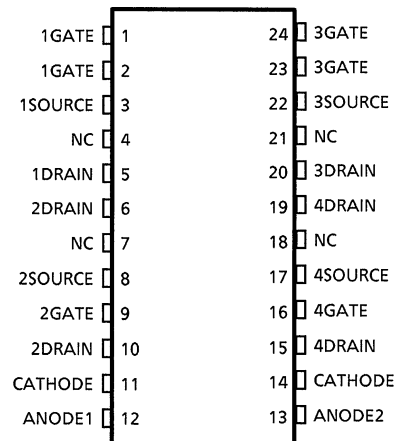


Weight: 0.14 g (Typ.)

BLOCK DIAGRAM



PIN CONNECTION (TOP VIEW)



NC: Non Connection

MAXIMUM RATINGS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT	
Drain-Source Voltage	V _{DSS}	60	V	
Drain-Gate Voltage (R _{GS} = 20 kΩ)	V _{DGR}	60	V	
Gate-Source Voltage	V _{GSS}	±20	V	
Drain Current	DC	I _D	0.8	A
	Pulse	I _{DP}	1.6	A
Diode Reverse Voltage	V _R	80	V	
Diode Average Rectifier Current	I _O	0.1	A	
Power Dissipation	—	P _D	0.78	W
	(Note 1)		0.89	W
Junction Temperature	T _j	150	°C	
Operating Temperature	T _{opr}	-40~85	°C	
Storage Temperature	T _{stg}	-55~150	°C	

Note 1: On Glass Epoxy PCB (50 × 50 × 1.6 mm Cu 40%)

This device is an electrostatic sensitivity device. Please handle with caution.

ELECTRICAL CHARACTERISTICS (Ta = 25°C)

CHARACTERISTIC	SYMBOL	TEST CIR-CUIT	TEST CONDITION	MIN	TYP.	MAX	UNIT
Gate Leakage Current	I _{GSS}	—	V _{GS} = ±16 V, V _{DS} = 0 V	—	—	±3	μA
Drain Cut-off Current	I _{DSS}	—	V _{DS} = 60 V, V _{GS} = 0 V	—	—	100	μA
Drain Source Braekdown Voltage	V (BR) DSS	—	I _D = 10 mA, V _{GS} = 0 V	60	—	—	V
Gate Thresold Voltage	V _{th}	—	V _{DS} = 10 V, I _D = 1 mA	0.8	—	2.0	V
Drain ON Current	I _{D (ON)}	—	V _{DS} = 4 V, V _{GS} = 4 V	0.8	—	—	A
Drain-Source ON Resistance	R _{DS (ON)}	—	V _{GS} = 4 V, I _D = 0.4 A	—	0.75	1.1	Ω
			V _{GS} = 10 V, I _D = 0.4 A	—	0.58	0.70	Ω
Diode Forward Voltage	V _{F (1)}	—	I _F = 1 mA	—	0.60	—	V
	V _{F (2)}	—	I _F = 10 mA	—	0.72	—	
	V _{F (3)}	—	I _F = 100 mA	—	1.0	1.4	
Diode Reverse Current	I _{R (1)}	—	V _R = 30 V	—	—	0.1	μA
	I _{R (2)}	—	V _R = 80 V	—	—	0.5	μA

PRECAUTIONS for USING

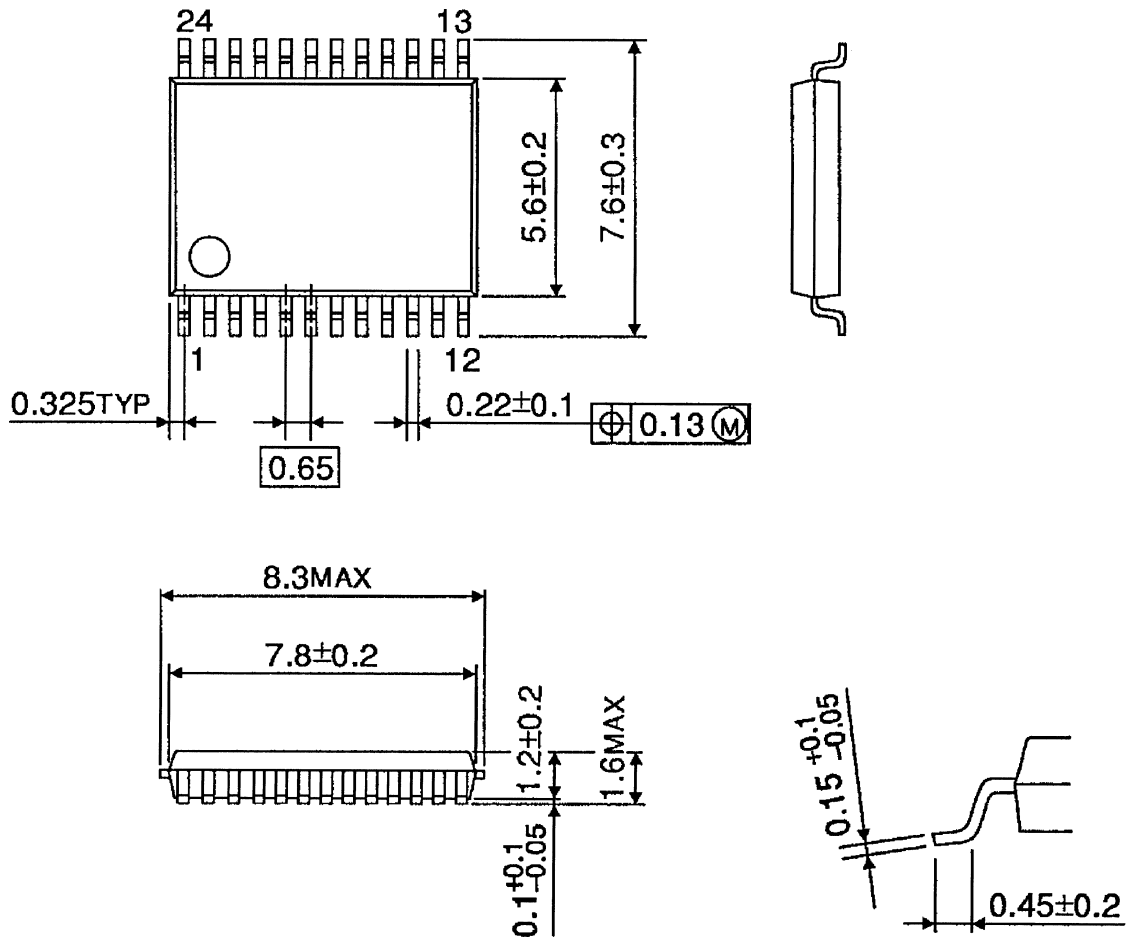
This IC does not integrate protection circuits such as overcurrent and overvoltage protectors. Thus, if excess current or voltage is applied to the IC, the IC may be damaged. Please design the IC so that excess current or voltage will not be applied to the IC.

Utmost care is necessary in the design of the output line, VCC and GND line since IC may be destroyed due to short-circuit between outputs, air contamination fault, or fault by improper grounding.

PACKAGE DIMENSIONS

SSOP24-P-300-0.65A

Unit: mm



Weight: 0.14 g (Typ.)

RESTRICTIONS ON PRODUCT USE

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