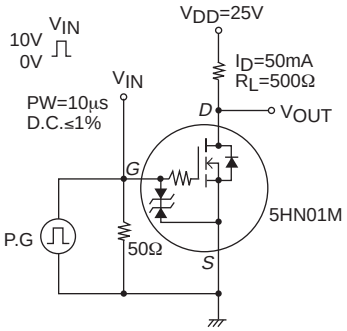
Electrical Characteristics at Ta=25°C

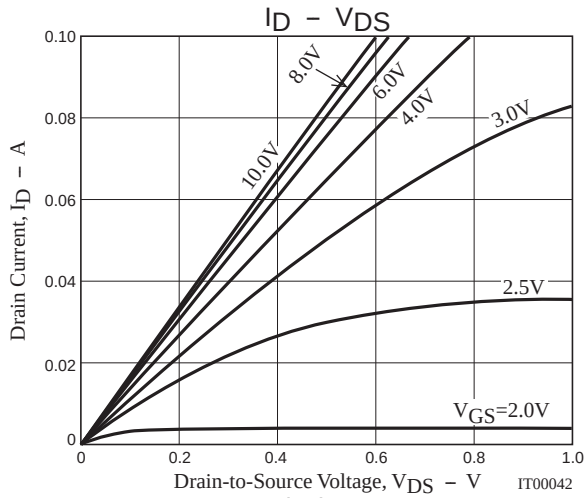
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	I_D=1mA, V_{GS}=0V	50			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=50V, V_{GS}=0V			1	μA
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=±16V, V_{DS}=0V			±10	μA
Cutoff Voltage	V_{GS}(off)	V_{DS}=10V, I_D=100μA	1		2.4	V
Forward Transfer Admittance	| yfs |	V_{DS}=10V, I_D=50mA	85	120		mS
Static Drain-to-Source On-State Resistance	R_{DS}(on)1	I_D=50mA, V_{GS}=10V		5.8	7.5	Ω
	R_{DS}(on)2	I_D=30mA, V_{GS}=4V		7.5	10.5	Ω
Input Capacitance	Ciss	V_{DS}=10V, f=1MHz		6.2		pF
Output Capacitance	Coss			4.4		pF
Reverse Transfer Capacitance	Crss			1.5		pF
Turn-ON Delay Time	t_d(on)	See specified Test Circuit.		10		ns
Rise Time	t_r			11		ns
Turn-OFF Delay Time	t_d(off)			105		ns
Fall Time	t_f			75		ns
Total Gate Charge	Qg	V_{DS}=10V, V_{GS}=10V, I_D=100mA		1.40		nC
Gate-to-Source Charge	Qgs			0.21		nC
Gate-to-Drain “Miller” Charge	Qgd			0.34		nC
Diode Forward Voltage	V_{SD}	I_S=100mA, V_{GS}=0V		0.85	1.2	V

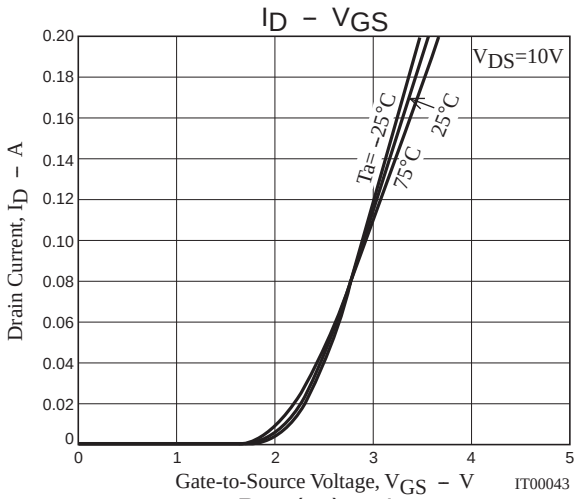
Switching Time Test Circuit

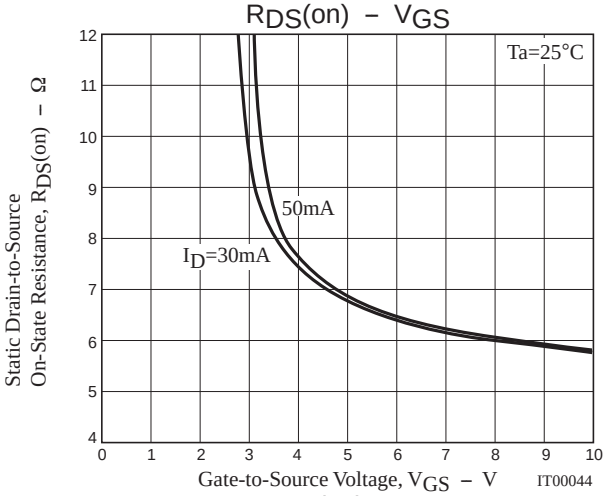


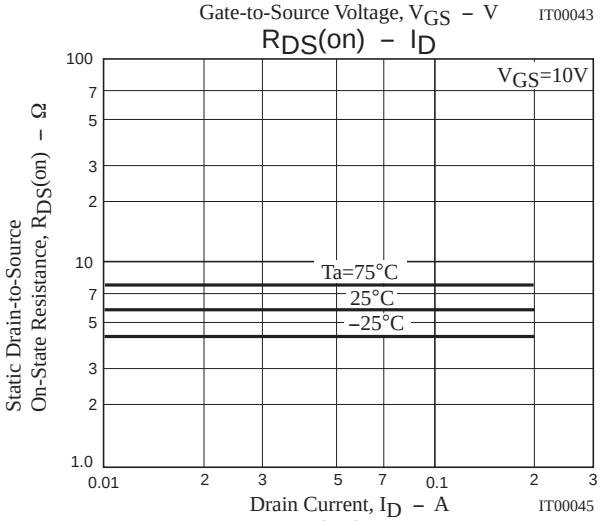
Ordering Information

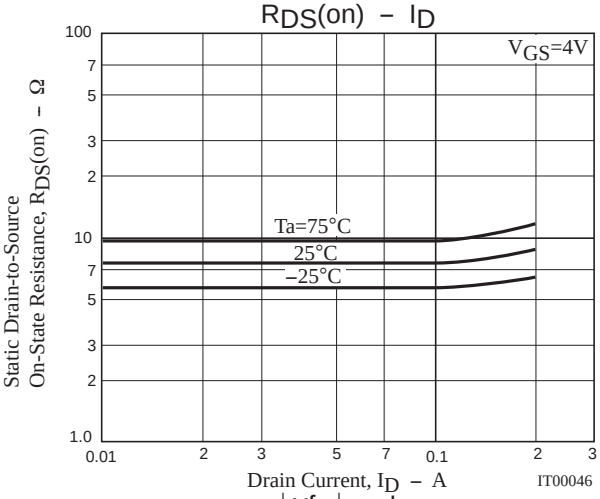
Device	Package	Shipping	memo
5HN01M-TL-E	MCP	3,000pcs./reel	Pb Free
5HN01M-TL-H	MCP	3,000pcs./reel	Pb Free and Halogen Free

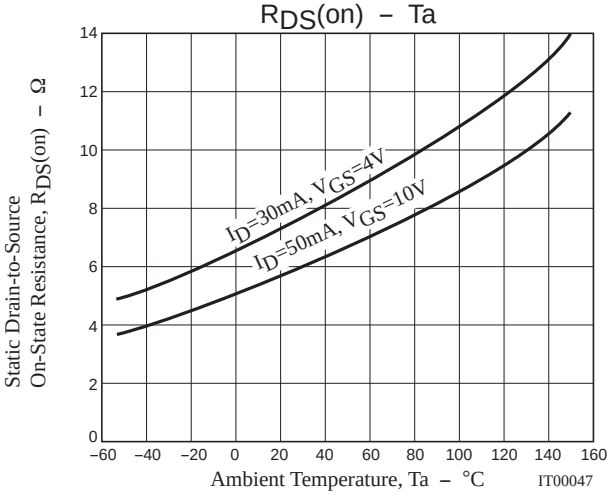


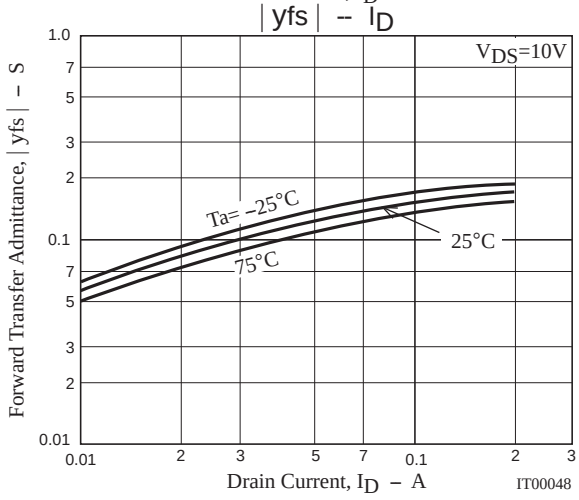


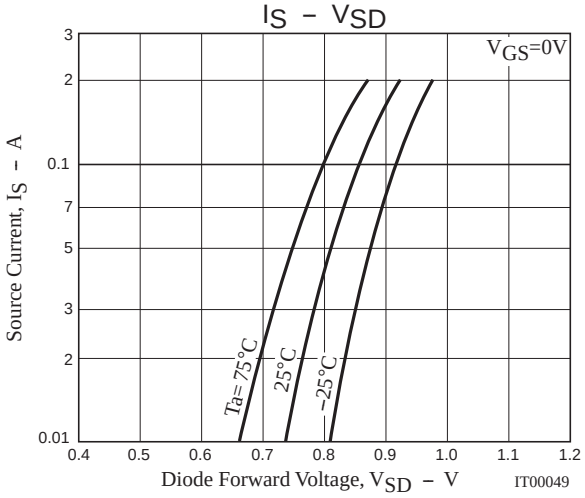


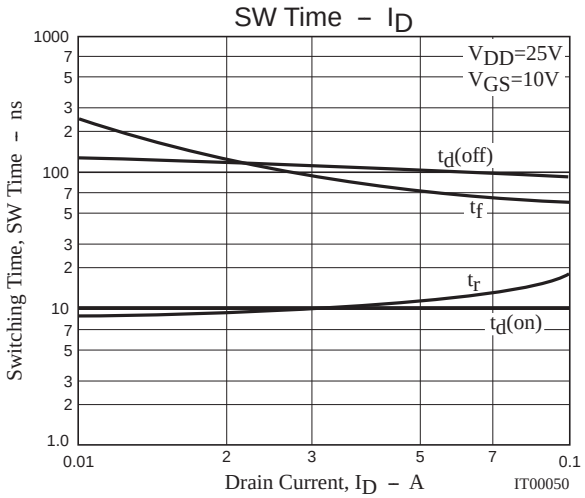


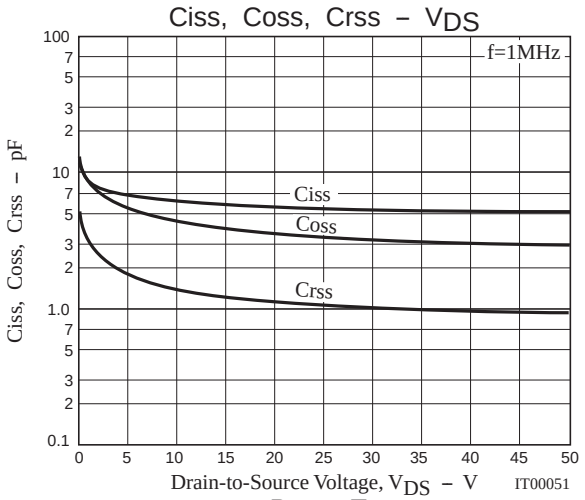


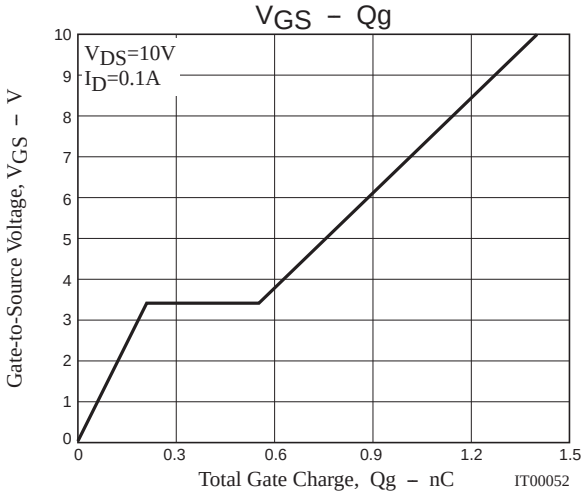


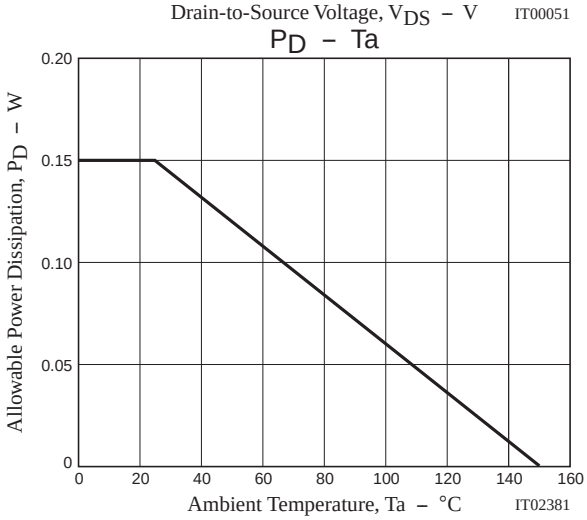












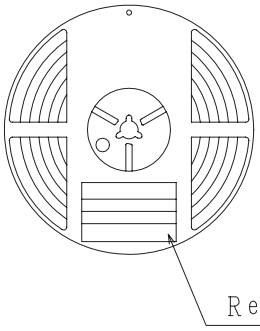
Embossed Taping Specification

5HN01M-TL-E, 5HN01M-TL-H

1. Packing Format

Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format	
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)
MCP	MCP	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

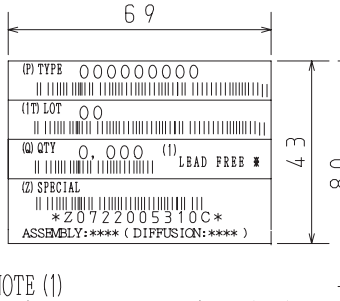
Packing method



Reel label

Reel label, Inner box label

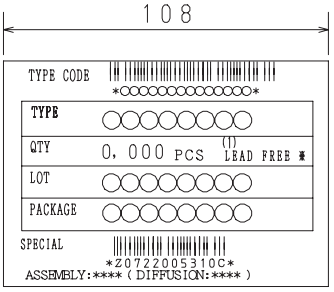
(unit:mm)



Type No.
LOT No.
Quantity
Origin

Outer box label

It is a label at the time of factory shipments. The form of a label may change in physical distribution process.



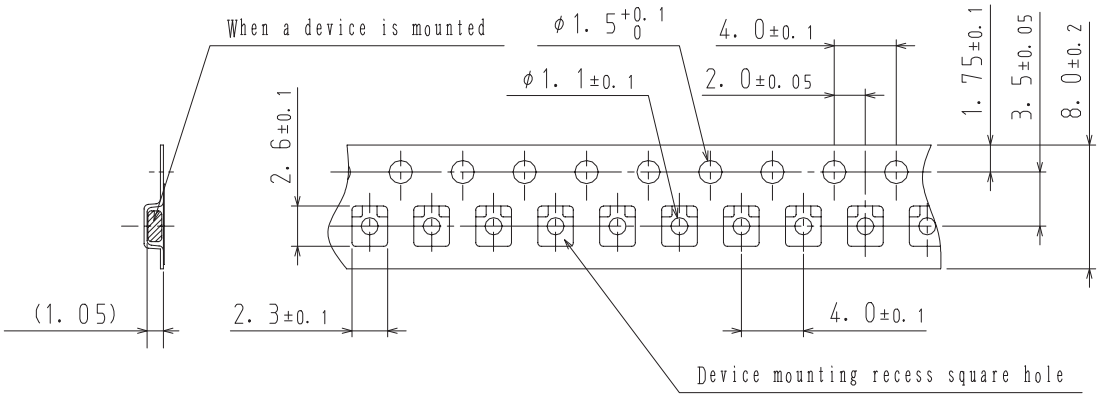
NOTE (1)

The LEAD FREE ※ description shows that the surface treatment of the terminal is lead free.

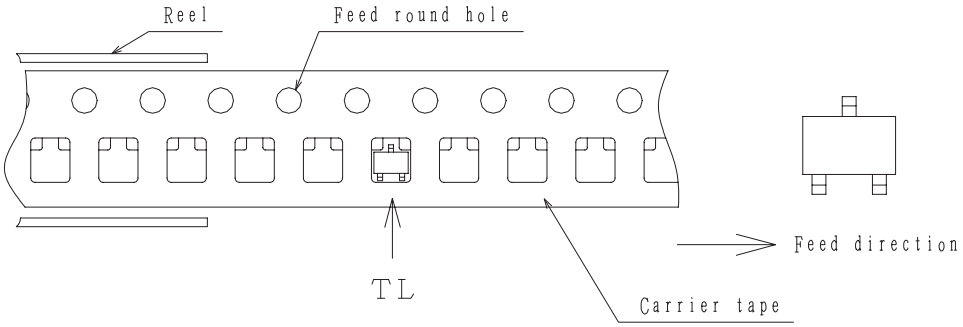
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

2-1. Carrier tape size (unit:mm)



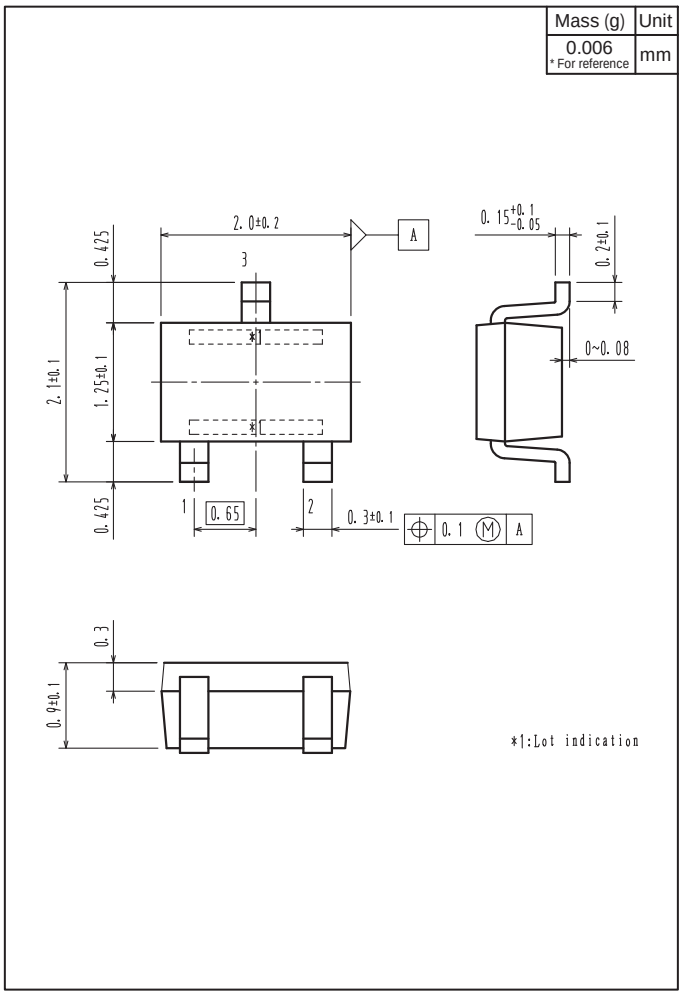
2-2. Device placement direction



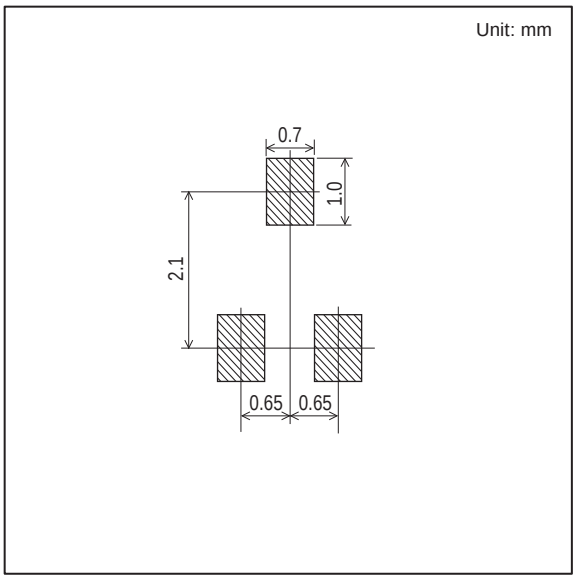
Those with oen electrode terminal on the feed hole side·····TL

Outline Drawing

5HN01M-TL-E, 5HN01M-TL-H



Land Pattern Example



Note on usage : Since the 5HN01M is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

This catalog provides information as of July, 2012. Specifications and information herein are subject to change without notice.