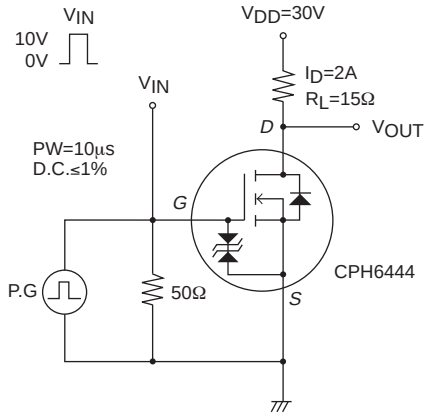
Electrical Characteristics at Ta=25°C

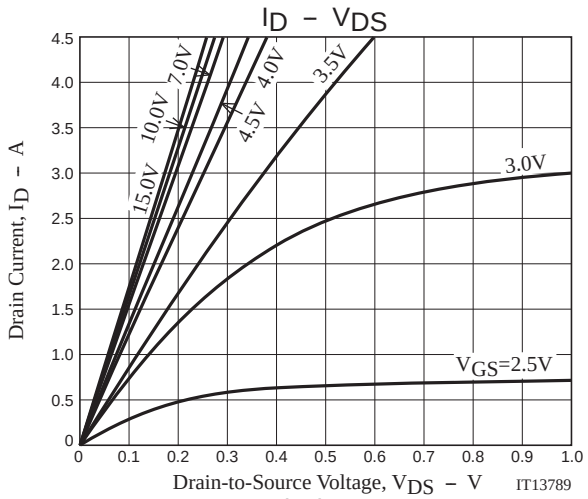
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	I_D=1mA, V_{GS}=0V	60			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=60V, V_{GS}=0V			1	μA
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=±16V, V_{DS}=0V			±10	μA
Cutoff Voltage	V_{GS}(off)	V_{DS}=10V, I_D=1mA	1.2		2.6	V
Forward Transfer Admittance	| yfs |	V_{DS}=10V, I_D=2A	1.8	3		S
Static Drain-to-Source On-State Resistance	R_{DS}(on)1	I_D=2A, V_{GS}=10V		60	78	mΩ
	R_{DS}(on)2	I_D=1A, V_{GS}=4.5V		74	104	mΩ
	R_{DS}(on)3	I_D=1A, V_{GS}=4V		81	114	mΩ
Input Capacitance	Ciss	V_{DS}=20V, f=1MHz		505		pF
Output Capacitance	Coss			57		pF
Reverse Transfer Capacitance	Crss			37		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		7.3		ns
Rise Time	t_r			9.8		ns
Turn-OFF Delay Time	$t_{d(off)}$			40		ns
Fall Time	t_f			24		ns
Total Gate Charge	Qg	V_{DS}=30V, V_{GS}=10V, I_D=4.5A		10		nC
Gate-to-Source Charge	Qgs			1.6		nC
Gate-to-Drain “Miller” Charge	Qgd			2.1		nC
Diode Forward Voltage	V_{SD}	I_S=4.5A, V_{GS}=0V		0.83	1.2	V

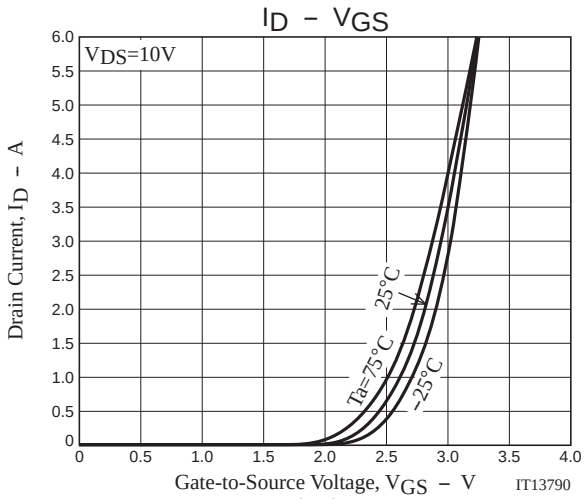
Switching Time Test Circuit

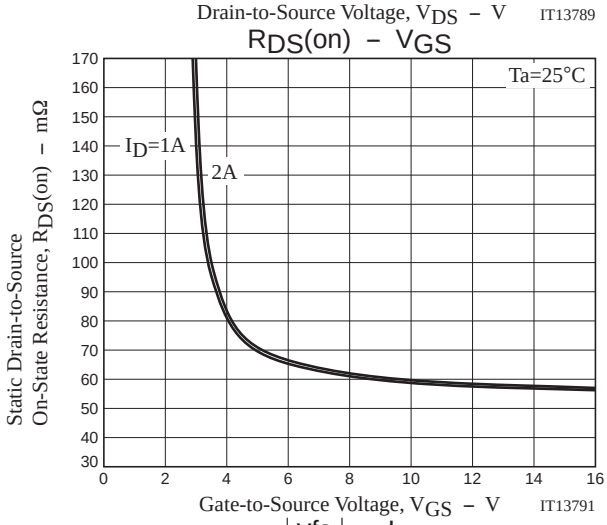


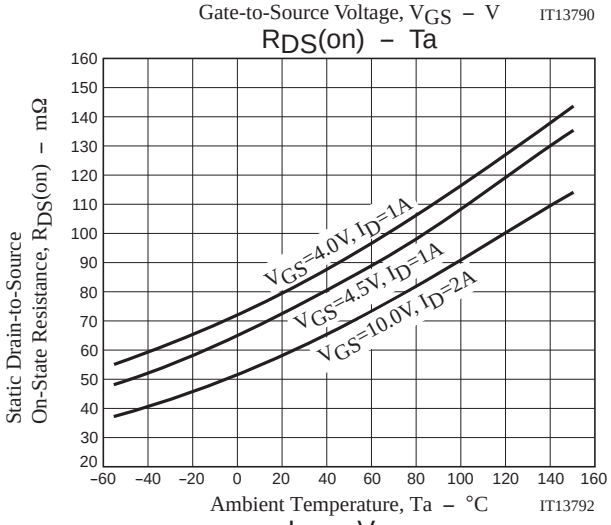
Ordering Information

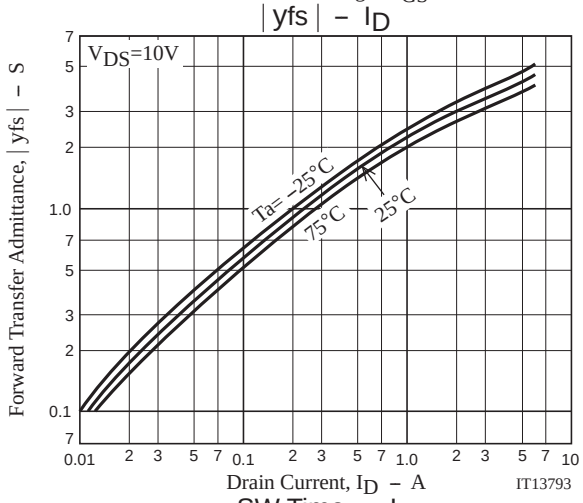
Device	Package	Shipping	memo
CPH6444-TL-E	CPH6	3,000pcs./reel	Pb Free

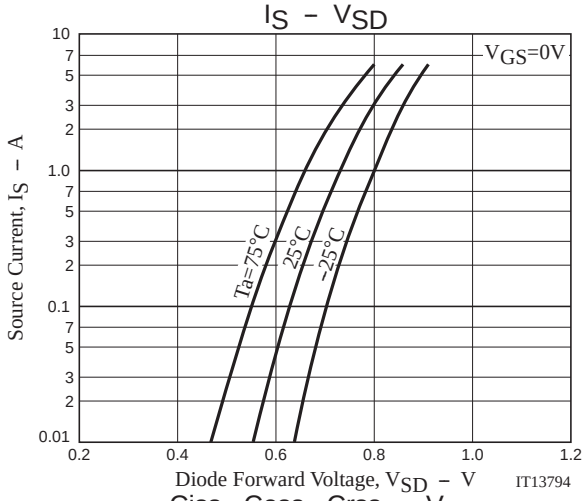


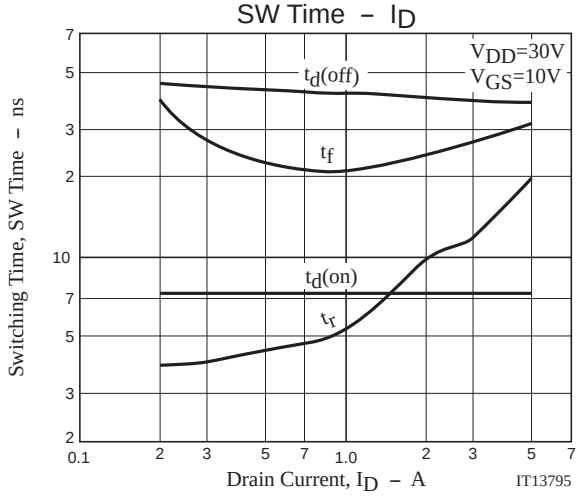


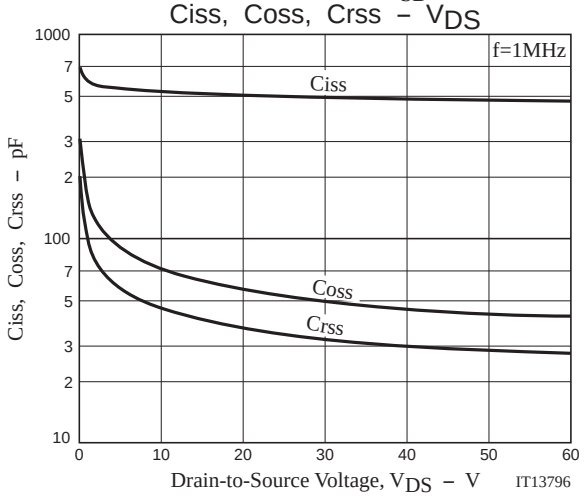


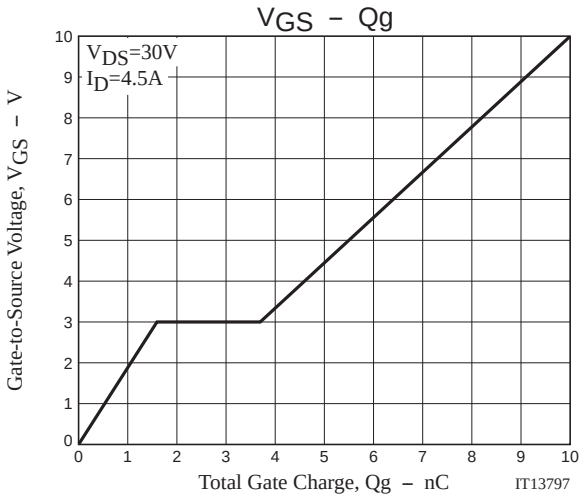


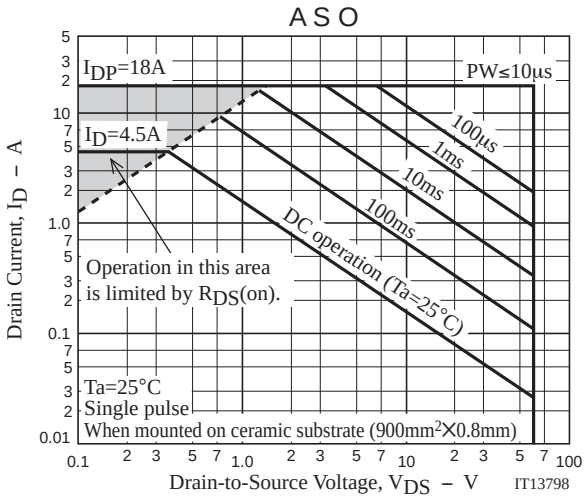


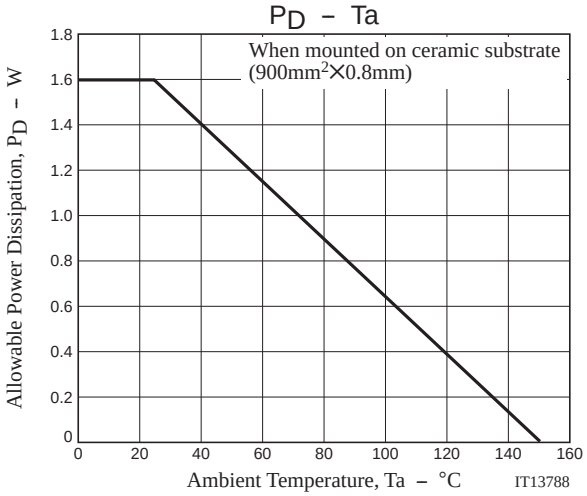












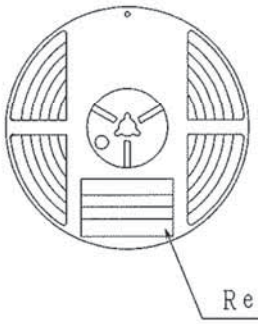
Embossed Taping Specification

CPH6444-TL-E

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)
CPH6	CPH6	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

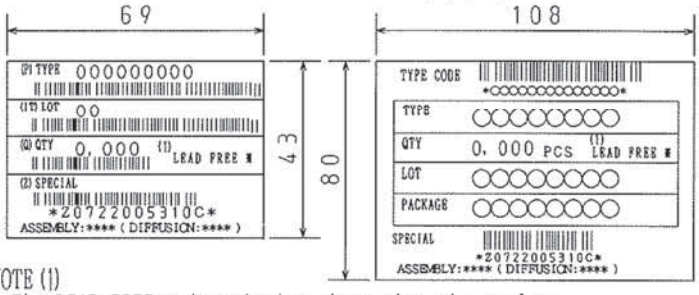
Packing method



Reel label

Reel label, Inner box label

(unit:mm)



Outer box label

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

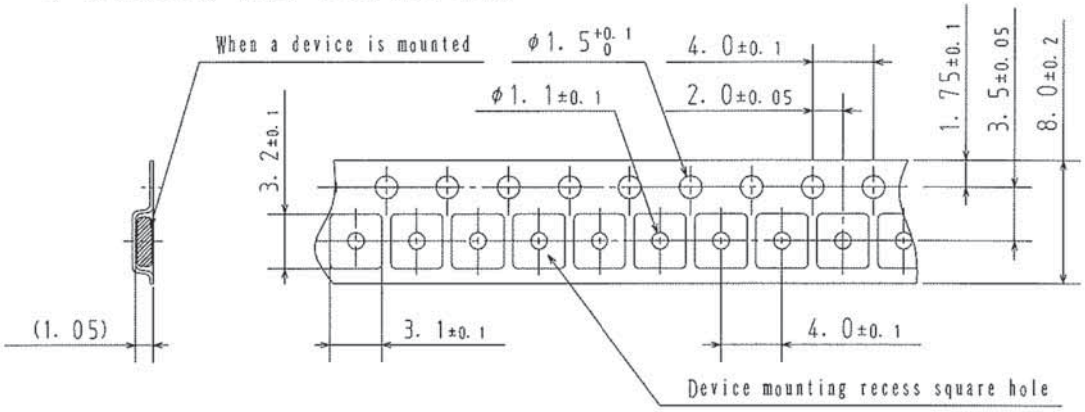
NOTE (1)

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

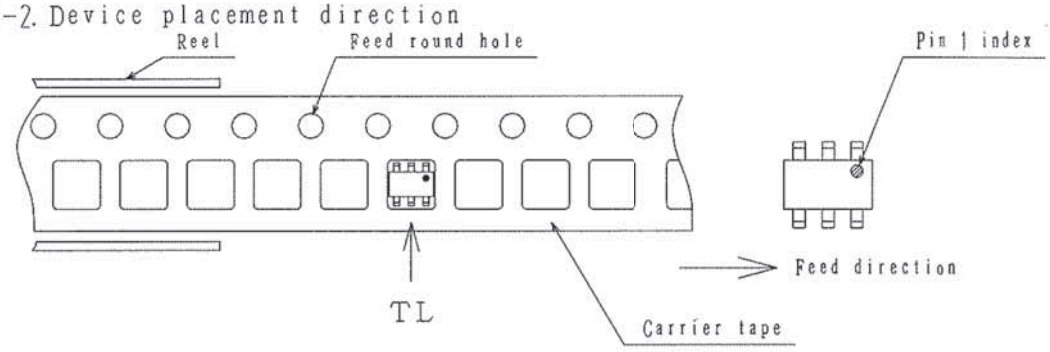
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



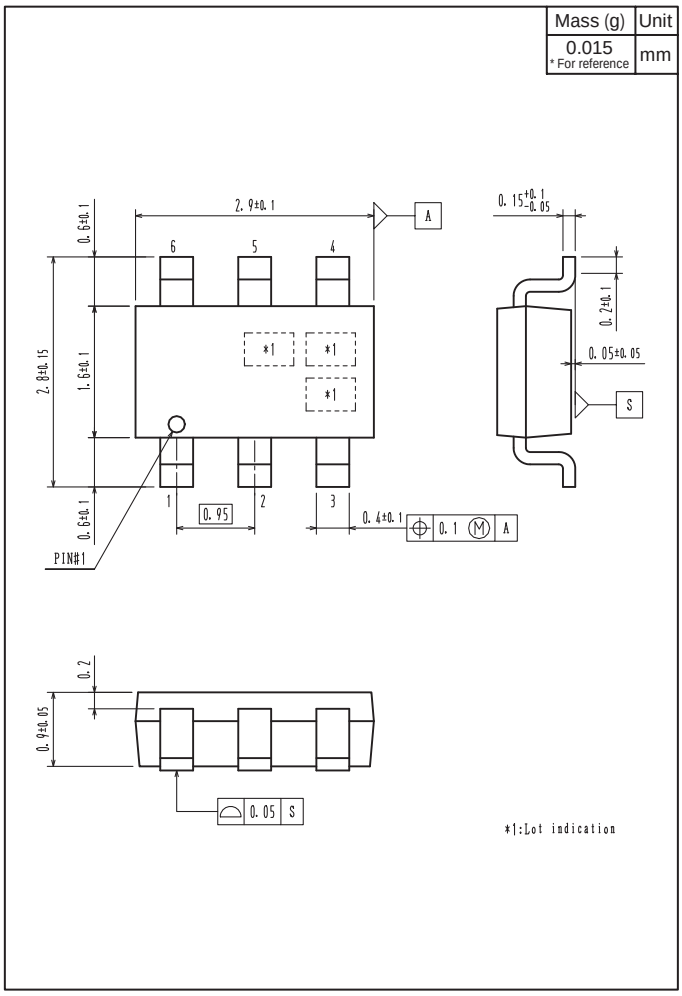
2-2. Device placement direction



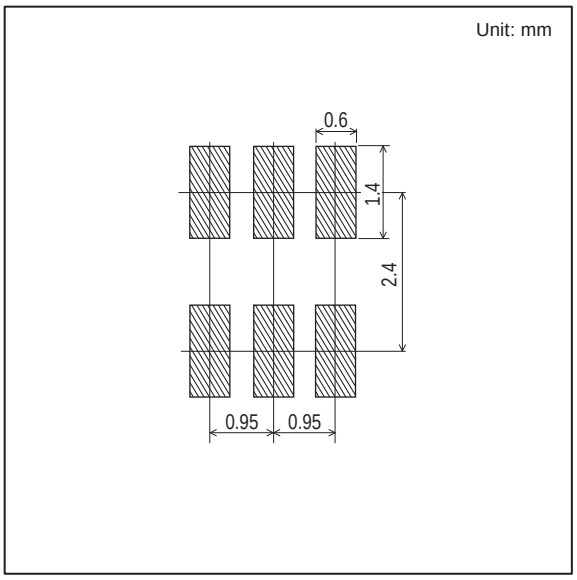
Those with pin 1 index on the feed hole side·····TL

Outline Drawing

CPH6444-TL-E



Land Pattern Example



Note on usage : Since the CPH6444 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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