



CPH6355 — P-Channel Silicon MOSFET

General-Purpose Switching Device

Applications

Features

- ON-resistance $R_{DS(on)1}=130m\Omega$ (typ.)
- 4V drive
- Halogen free compliance

Specifications

Absolute Maximum Ratings at $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSS}		-30	V
Gate-to-Source Voltage	V_{GSS}		± 20	V
Drain Current (DC)	I_D		-3	A
Drain Current (Pulse)	I_{DP}	$PW \leq 10\mu s$, duty cycle $\leq 1\%$	-12	A
Allowable Power Dissipation	P_D	When mounted on ceramic substrate (1500mm ² x0.8mm)	1.6	W
Channel Temperature	T_{ch}		150	$^\circ C$
Storage Temperature	T_{stg}		-55 to +150	$^\circ C$

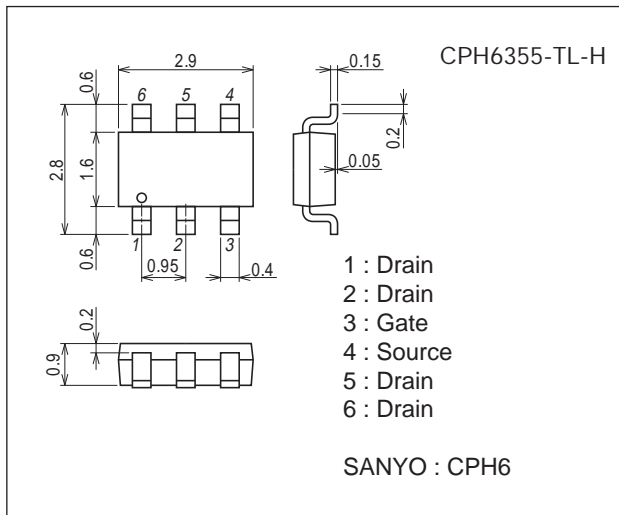
This product is designed to "ESD immunity < 200V**", so please take care when handling.

* Machine Model

Package Dimensions

unit : mm (typ)

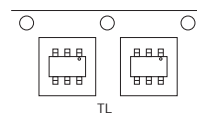
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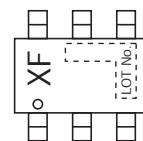
Product & Package Information

- Package : CPH6
- JEITA, JEDEC : SC-74, SOT-26, SOT-457
- Minimum Packing Quantity : 3,000 pcs./reel

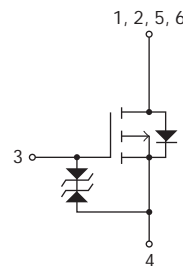
Packing Type: TL



Marking



Electrical Connection

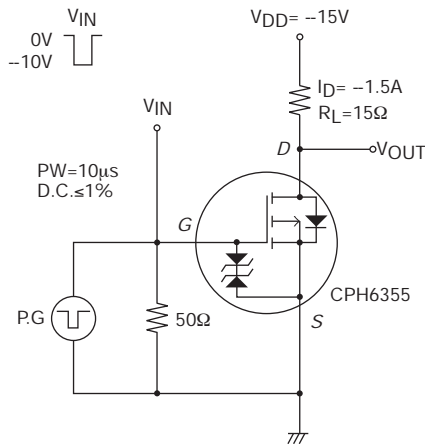


CPH6355

Electrical Characteristics at Ta=25°C

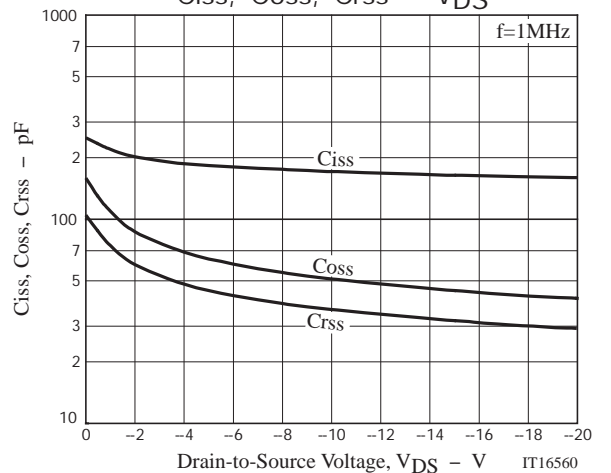
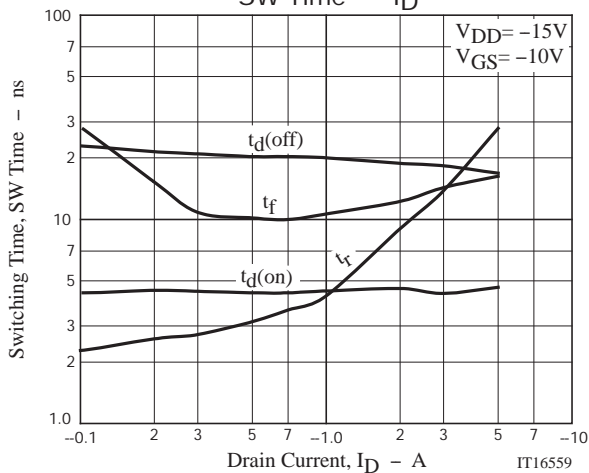
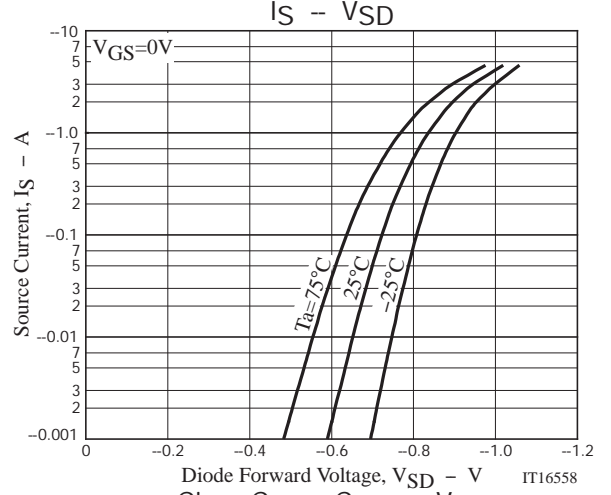
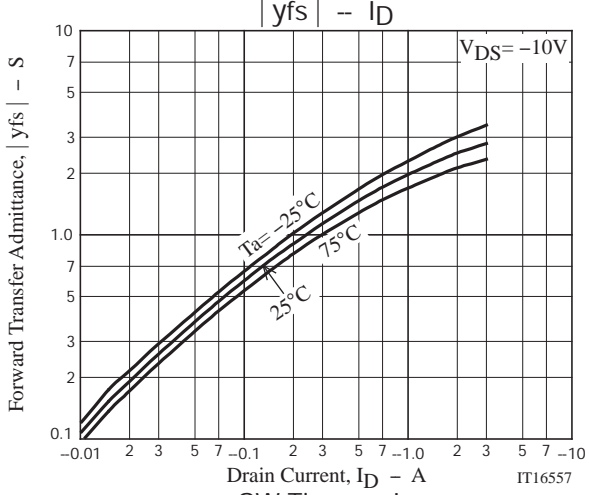
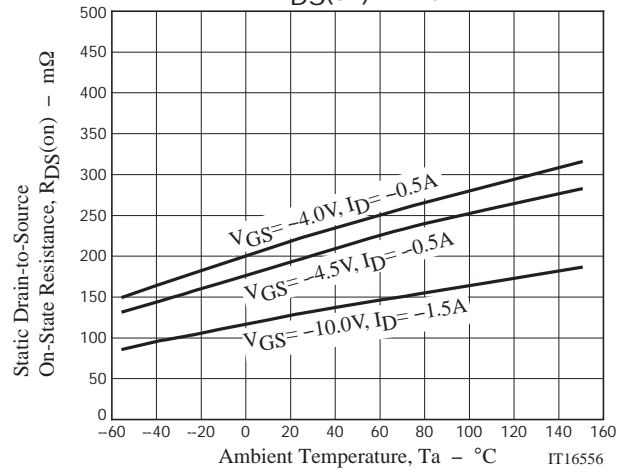
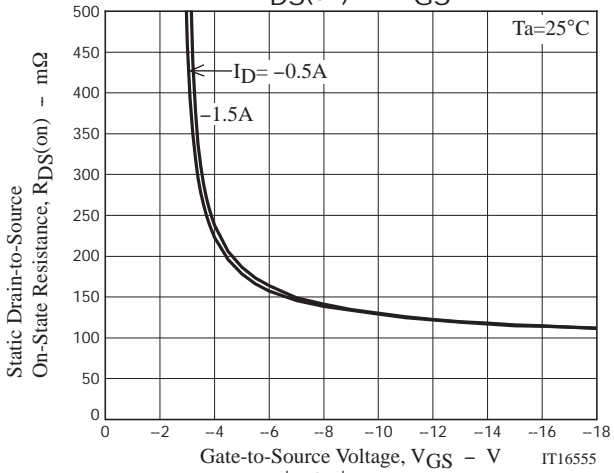
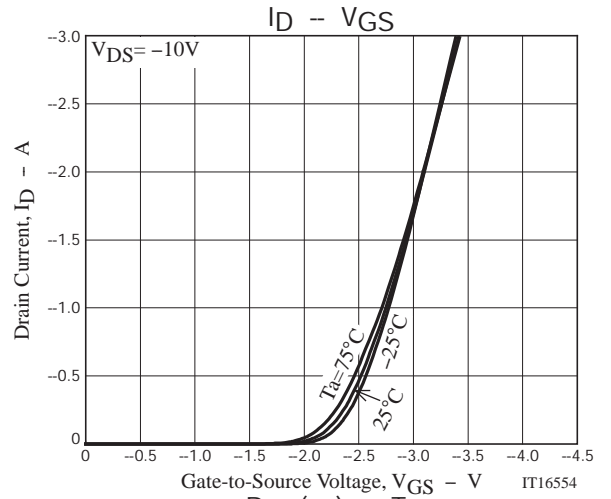
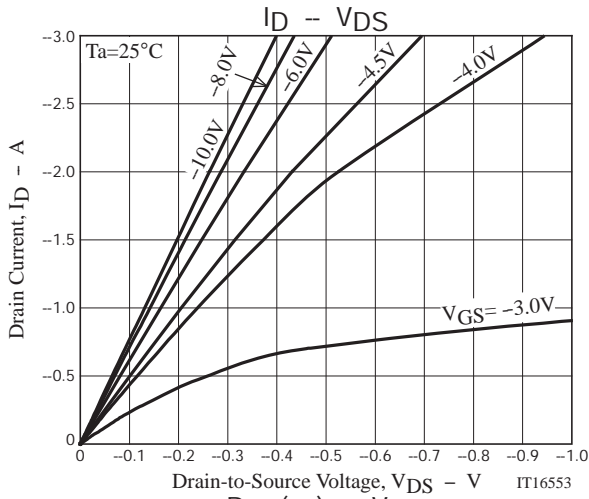
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	V(BR)DSS	ID=-1mA, VGS=0V	-30			V
Zero-Gate Voltage Drain Current	IDSS	VDS=-30V, VGS=0V			-1	μA
Gate-to-Source Leakage Current	IGSS	VGS=±16V, VDS=0V			±10	μA
Cutoff Voltage	VGS(off)	VDS=-10V, ID=-1mA	-1.2		-2.6	V
Forward Transfer Admittance	yfs	VDS=-10V, ID=-1.5A		2.3		S
Static Drain-to-Source On-State Resistance	RDS(on)1	ID=-1.5A, VGS=-10V		130	169	mΩ
	RDS(on)2	ID=-0.5A, VGS=-4.5V		197	276	mΩ
	RDS(on)3	ID=-0.5A, VGS=-4V		223	313	mΩ
Input Capacitance	Ciss			172		pF
Output Capacitance	Coss	VDS=-10V, f=1MHz		51		pF
Reverse Transfer Capacitance	Crss			36		pF
Turn-ON Delay Time	td(on)	See specified Test Circuit.		4.6		ns
Rise Time	tr			6.6		ns
Turn-OFF Delay Time	td(off)			19.4		ns
Fall Time	tf			11.4		ns
Total Gate Charge	Qg				3.9	
Gate-to-Source Charge	Qgs	VDS=-15V, VGS=-10V, ID=-3A		0.6		nC
Gate-to-Drain "Miller" Charge	Qgd			0.8		nC
Diode Forward Voltage	VSD		IS=-3A, VGS=0V		-0.95	-1.5

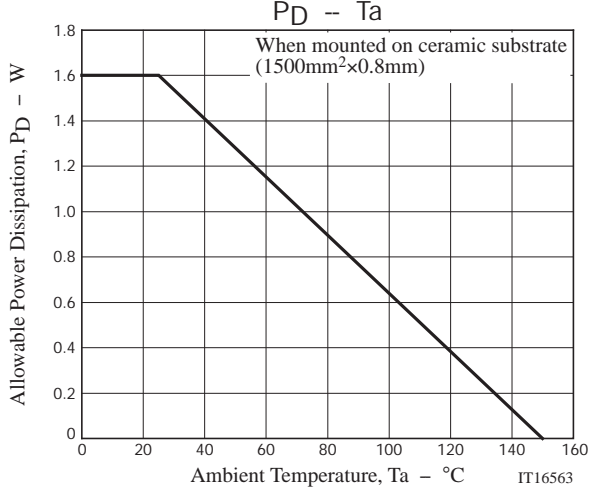
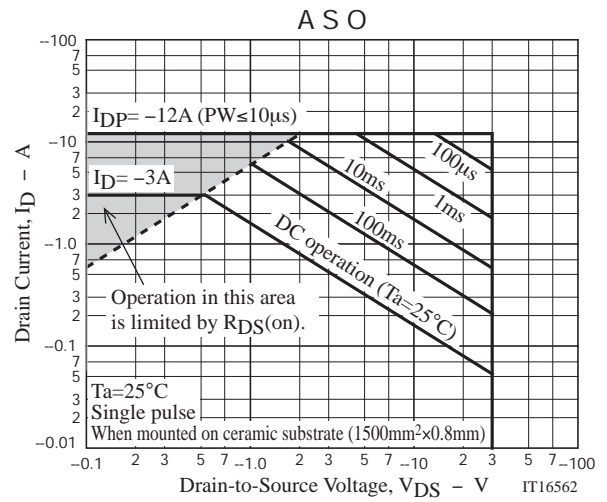
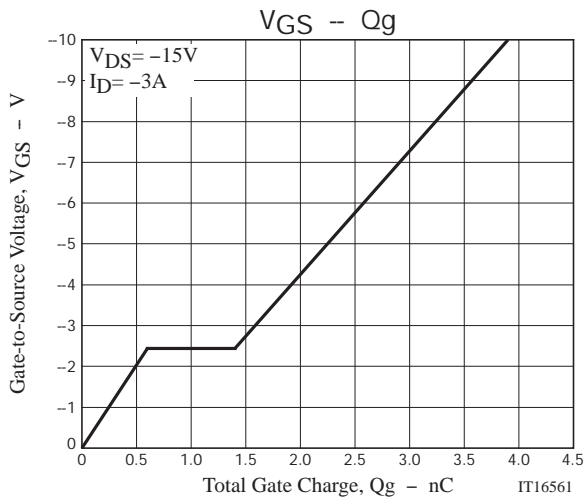
Switching Time Test Circuit



Ordering Information

Device	Package	Shipping	memo
CPH6355-TL-H	CPH6	3,000pcs./reel	Pb Free and Halogen Free



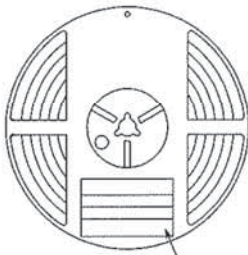


Embossed Taping Specification
CPH6355-TL-H

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)
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

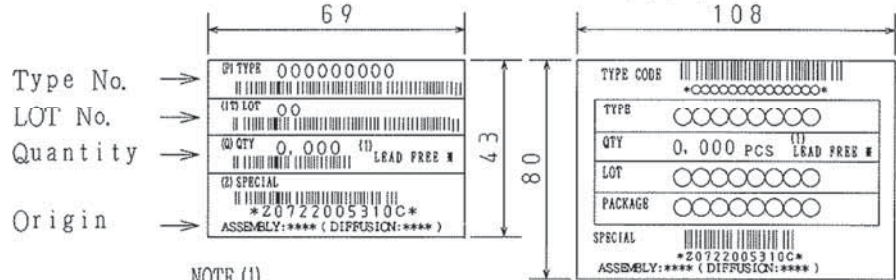


Reel label

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.



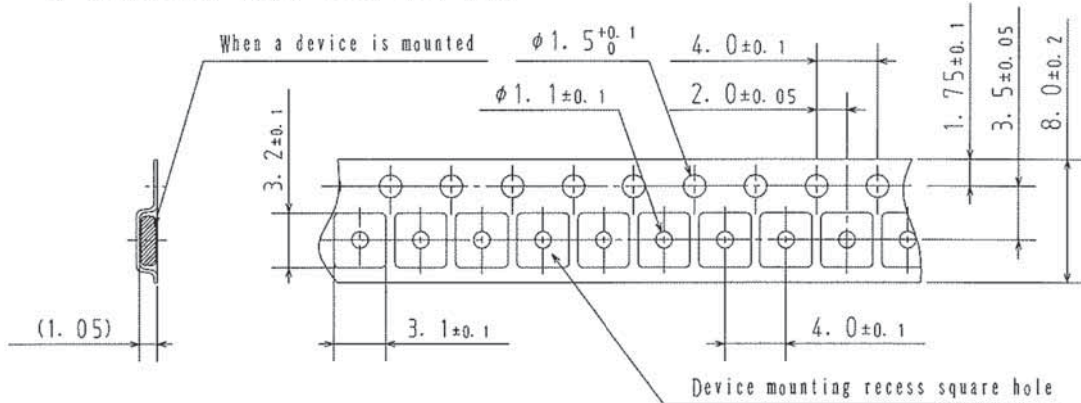
NOTE (1)

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

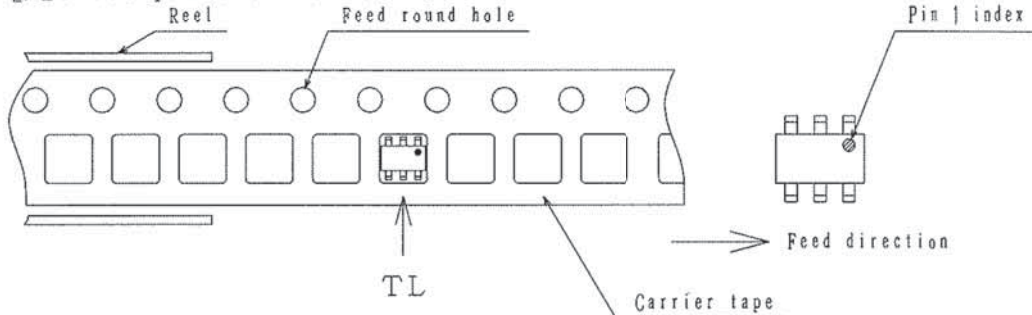
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

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



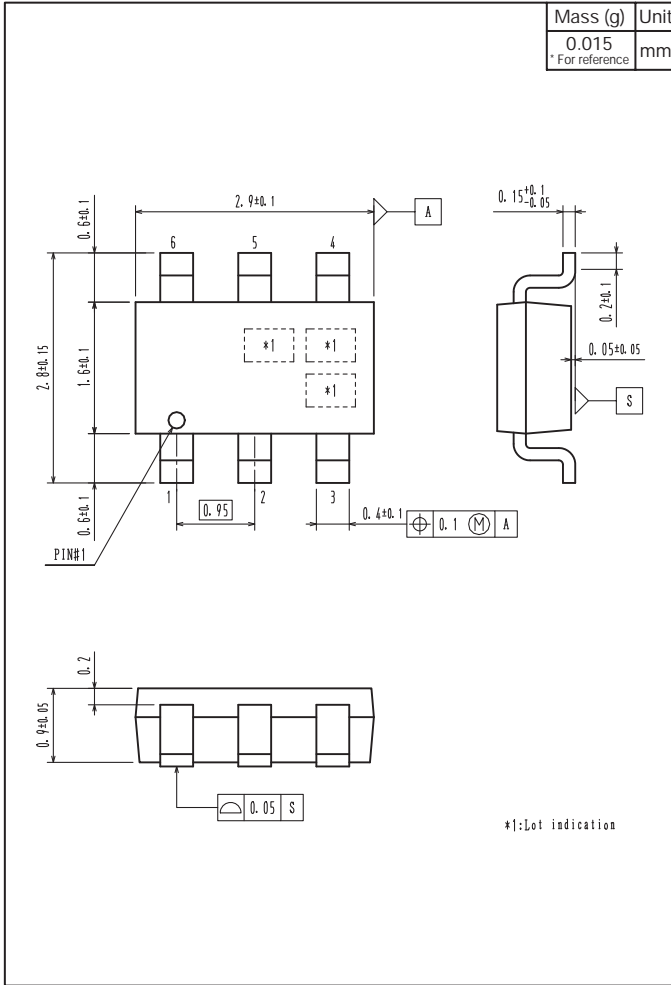
2-2. Device placement direction



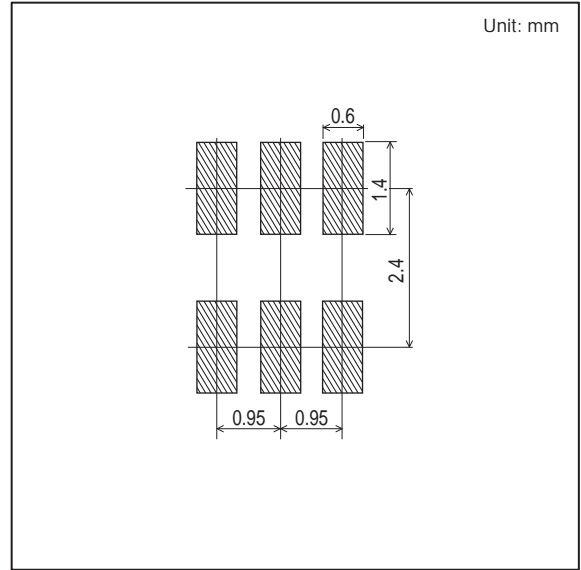
Those with pin 1 index on the feed hole side.....TL

CPH6355

Outline Drawing CPH6355-TL-H



Land Pattern Example



Note on usage : Since the CPH6355 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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