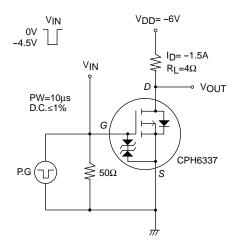
### **CPH6337**

### **ELECTRICAL CHARACTERISTICS** at Ta = 25°C (Note 3)

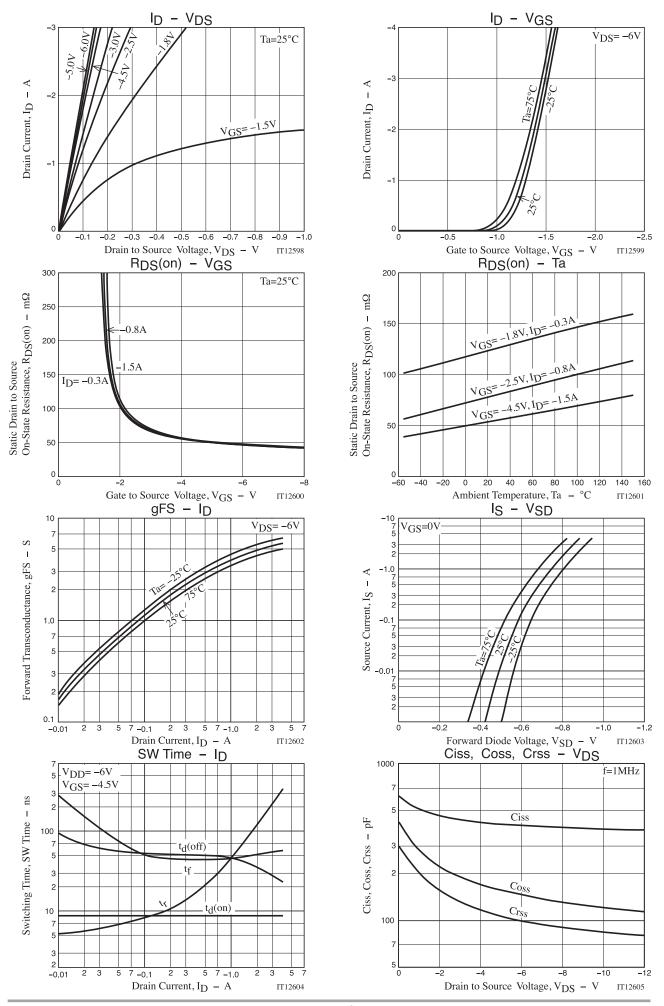
Parameter	Symbol	Conditions	Value			Unit
Farameter		Conditions	min	typ	max	Offic
Drain to Source Breakdown Voltage	V(BR)DSS	I <sub>D</sub> =-1mA, V <sub>G</sub> S=0V	-12			V
Zero-Gate Voltage Drain Current	IDSS	V <sub>DS</sub> =-12V, V <sub>GS</sub> =0V			-10	μΑ
Gate to Source Leakage Current	IGSS	V <sub>GS</sub> =±8V, V <sub>DS</sub> =0V			±10	μΑ
Gate Threshold Voltage	VGS(th)	V <sub>DS</sub> =-6V, I <sub>D</sub> =-1mA	-0.4		-1.4	V
Forward Transconductance	gFS	V <sub>DS</sub> =-6V, I <sub>D</sub> =-1.5A	2.7	4.5		S
Static Drain to Source On-State Resistance	R <sub>DS</sub> (on)1	I <sub>D</sub> =-1.5A, V <sub>G</sub> S=-4.5V		54	70	mΩ
	R <sub>DS</sub> (on)2	I <sub>D</sub> =-0.8A, V <sub>G</sub> S=-2.5V		80	115	mΩ
	R <sub>DS</sub> (on)3	I <sub>D</sub> =-0.3A, V <sub>G</sub> S=-1.8V		125	215	mΩ
Input Capacitance	Ciss			405		pF
Output Capacitance	Coss	V <sub>DS</sub> =–6V, f=1MHz		145		pF
Reverse Transfer Capacitance	Crss			100		pF
Turn-ON Delay Time	t <sub>d</sub> (on)			8.8		ns
Rise Time	tr	On a supplied Took Observit		80		ns
Turn-OFF Delay Time	t <sub>d</sub> (off)	See specified Test Circuit		41		ns
Fall Time	tf			50		ns
Total Gate Charge	Qg			5.6		nC
Gate to Source Charge	Qgs	V <sub>DS</sub> =-6V, V <sub>GS</sub> =-4.5V, I <sub>D</sub> =-3.5A		0.7		nC
Gate to Drain "Miller" Charge	Qgd			1.6		nC
Forward Diode Voltage	V <sub>SD</sub>	I <sub>S</sub> =-3.5A, V <sub>GS</sub> =0V		-0.86	-1.5	V

Note 3 : Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

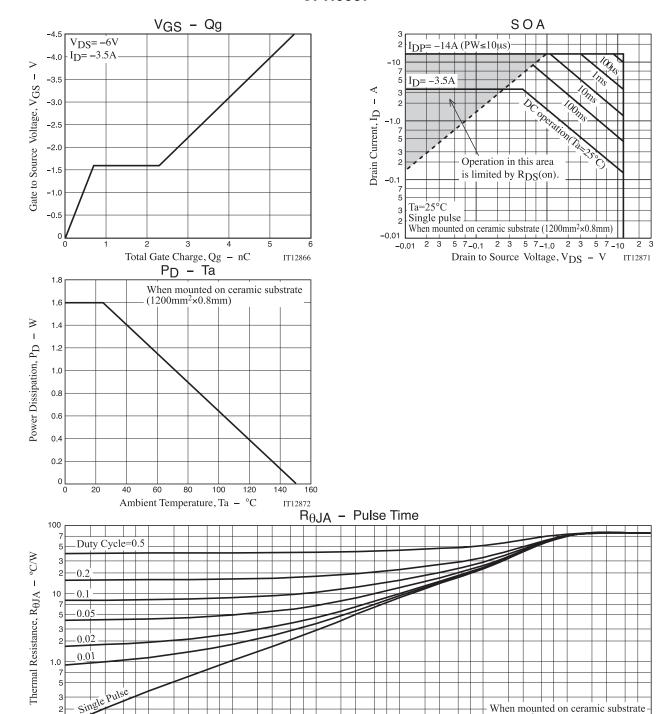
# **Switching Time Test Circuit**



## **CPH6337**



# **CPH6337**



(1200mm<sup>2</sup>×0.8mm) 1 2 3 5 7 1.0

2 3

5 7 <sub>10</sub> IT17942

5 70.00001 2 3 5 70.0001 2 3 5 7 0.001 2 3 5 7 0.01 2 3 5 7 0.1

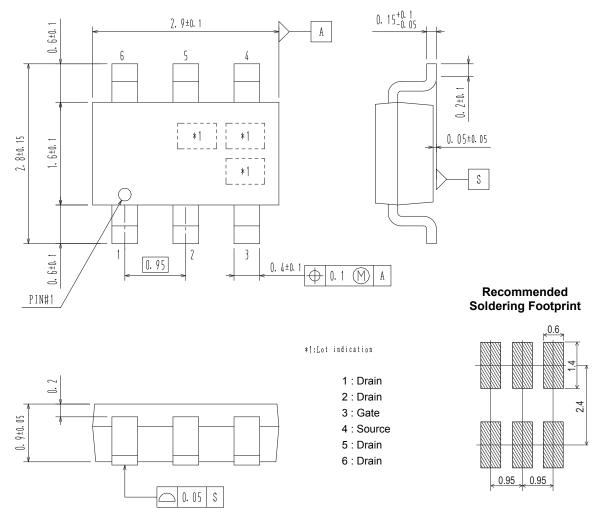
Pulse Time, PT - s

#### PACKAGE DIMENSIONS

unit: mm

## СРН6

CASE 318BD ISSUE O



#### ORDERING INFORMATION

Device	Marking	Package	Shipping (Qty / Packing)	
CPH6337-TL-E	YP	CPH6 (Pb-Free)	2 000 / Tono % Dod	
CPH6337-TL-W	TF	CPH6 (Pb-Free / Halogen Free)	3,000 / Tape & Reel	

<sup>†</sup> For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D. http://www.onsemi.com/pub\_link/Collateral/BRD8011-D.PDF

Note on usage: Since the CPH6337 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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