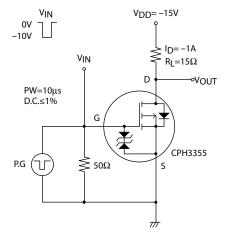
## **CPH3355**

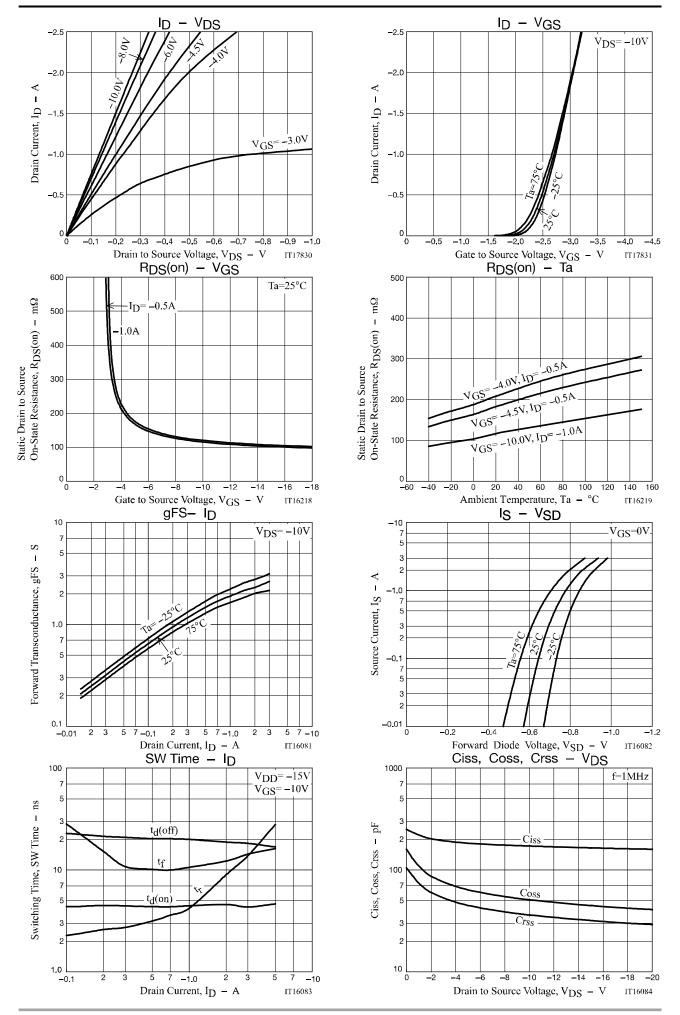
#### **Electrical Characteristics** at Ta = 25°C

Parameter	Symbol	Conditions	Value			11-4
			min	typ	max	Unit
Drain to Source Breakdown Voltage	V(BR)DSS	I <sub>D</sub> =-1mA, V <sub>GS</sub> =0V	-30			V
Zero-Gate Voltage Drain Current	IDSS	V <sub>DS</sub> =-30V, V <sub>GS</sub> =0V			-1	μΑ
Gate to Source Leakage Current	IGSS	V <sub>GS</sub> =±16V, V <sub>DS</sub> =0V			±10	μΑ
Gate Threshold Voltage	V <sub>GS</sub> (th)	V <sub>DS</sub> =-10V, I <sub>D</sub> =-1mA	-1.2		-2.6	V
Forward Transconductance	gFS	V <sub>DS</sub> =-10V, I <sub>D</sub> =-1A		1.9		S
Static Drain to Source On-State Resistance	R <sub>DS</sub> (on)1	I <sub>D</sub> =-1A, V <sub>G</sub> S=-10V		120	156	mΩ
	R <sub>DS</sub> (on)2	I <sub>D</sub> =-0.5A, V <sub>G</sub> S=-4.5V		187	262	mΩ
	R <sub>DS</sub> (on)3	I <sub>D</sub> =-0.5A, V <sub>G</sub> S=-4V		213	299	mΩ
Input Capacitance	Ciss			172		pF
Output Capacitance	Coss	V <sub>DS</sub> =-10V, f=1MHz		51		pF
Reverse Transfer Capacitance	Crss			36		pF
Turn-ON Delay Time	t <sub>d</sub> (on)	See specified Test Circuit		4.5		ns
Rise Time	t <sub>r</sub>			4.2		ns
Turn-OFF Delay Time	t <sub>d</sub> (off)			20		ns
Fall Time	tf	1		10.6		ns
Total Gate Charge	Qg			3.9		nC
Gate to Source Charge	Qgs	V <sub>DS</sub> =-15V, V <sub>GS</sub> =-10V, I <sub>D</sub> =-2.5A		0.6		nC
Gate to Drain "Miller" Charge	Qgd	]		8.0		nC
Forward Diode Voltage	V <sub>SD</sub>	I <sub>S</sub> =-2.5A, V <sub>G</sub> S=0V		-0.86	-1.5	V

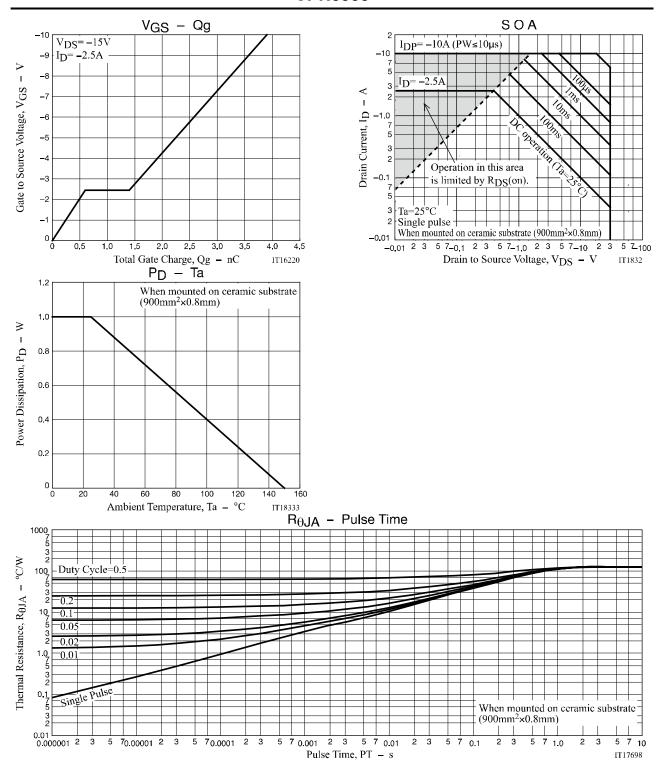
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

# **Switching Time Test Circuit**





#### **CPH3355**



### **Package Dimensions**

CPH3355-TL-H/ CPH3355-TL-W

#### CPH3

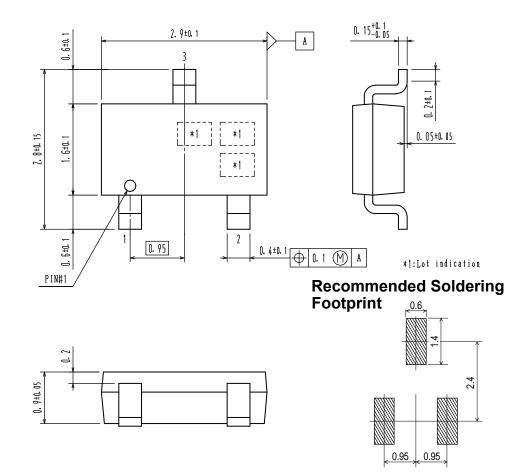
CASE 318BA ISSUE O

Unit: mm

1: Gate

2: Source

3: Drain



#### ORDERING INFORMATION

Device	Package	Shipping	Note	
CPH3355-TL-H	CPH3, SC-59	3,000	Pb-Free	
CPH3355-TL-W	SOT-23, TO-236	pcs. / reel	and Halogen Free	

Note on usage: Since the CPH3355 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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