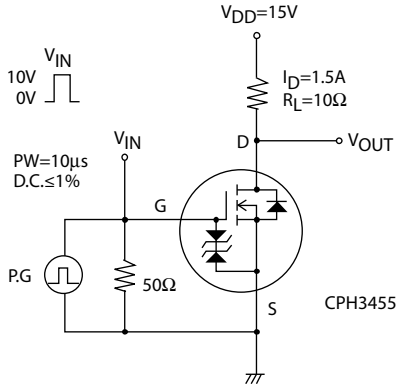
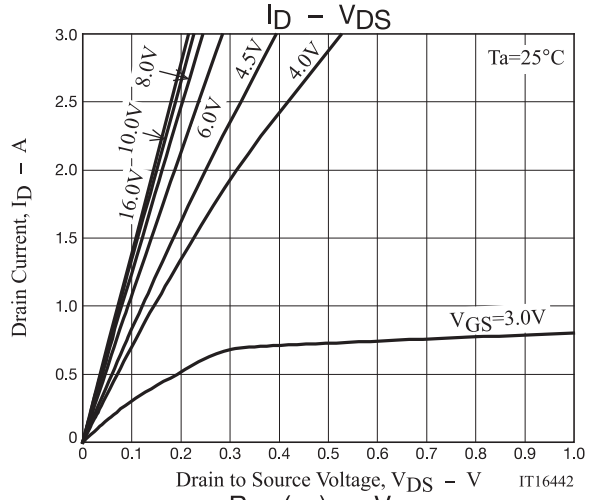
ELECTRICAL CHARACTERISTICS at Ta = 25°C (Note 3)

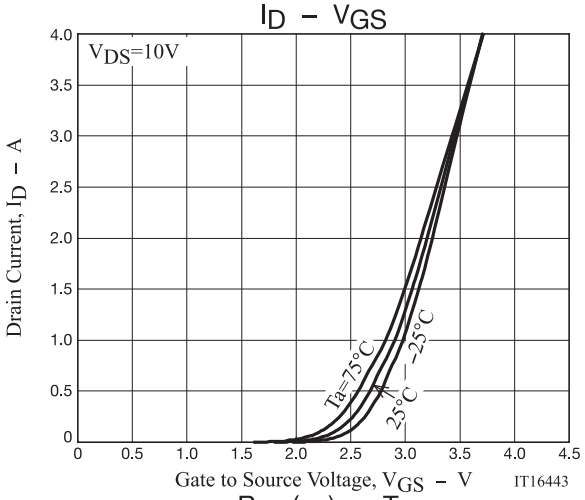
Parameter	Symbol	Conditions	Value			Unit
			min	typ	max	
Drain to Source Breakdown Voltage	$V_{(BR)DSS}$	I_D=1mA, V_{GS}=0V	35			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=35V, V_{GS}=0V			1	μA
Gate to Source Leakage Current	I_{GSS}	V_{GS}=±16V, V_{DS}=0V			±10	μA
Gate Threshold Voltage	$V_{GS}(th)$	V_{DS}=10V, I_D=1mA	1.2		2.6	V
Forward Transconductance	g_{FS}	V_{DS}=10V, I_D=1.5A		1.7		S
Static Drain to Source On-State Resistance	$R_{DS}(on)1$	I_D=1.5A, V_{GS}=10V		80	104	mΩ
	$R_{DS}(on)2$	I_D=0.75A, V_{GS}=4.5V		123	173	mΩ
	$R_{DS}(on)3$	I_D=0.75A, V_{GS}=4V		148	208	mΩ
Input Capacitance	Ciss	V_{DS}=20V, f=1MHz		186		pF
Output Capacitance	Coss			36		pF
Reverse Transfer Capacitance	Crss			22		pF
Turn-ON Delay Time	$t_d(on)$	See specified Test Circuit		4.2		ns
Rise Time	t_r			4.7		ns
Turn-OFF Delay Time	$t_d(off)$			15		ns
Fall Time	t_f			5.7		ns
Total Gate Charge	Qg	V_{DS}=20V, V_{GS}=10V, I_D=3A		4		nC
Gate to Source Charge	Qgs			0.9		nC
Gate to Drain “Miller” Charge	Qgd			0.7		nC
Forward Diode Voltage	V_{SD}	I_S=3A, V_{GS}=0V		0.86	1.2	V

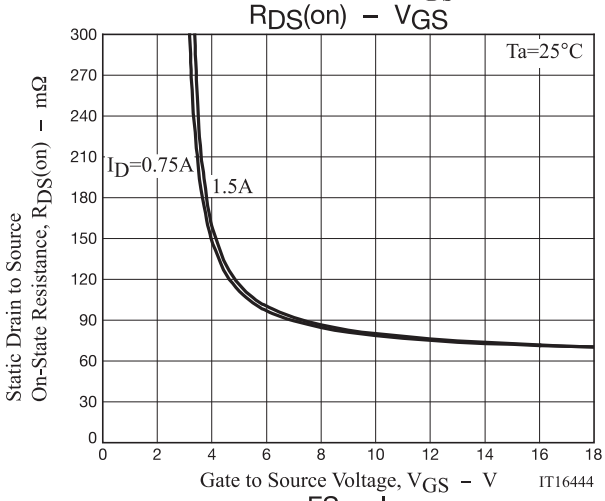
Note 3 : Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

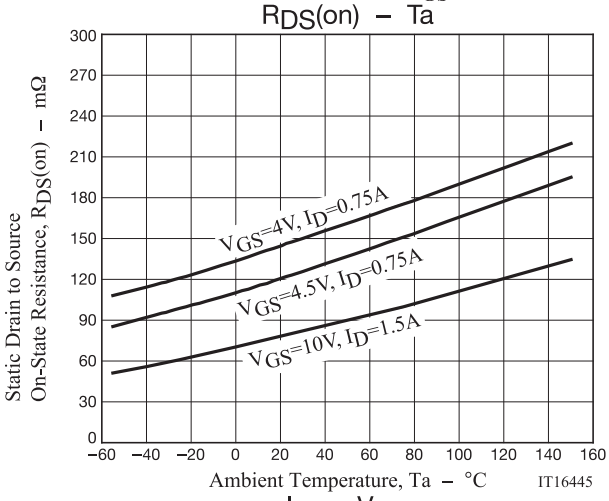
Switching Time Test Circuit

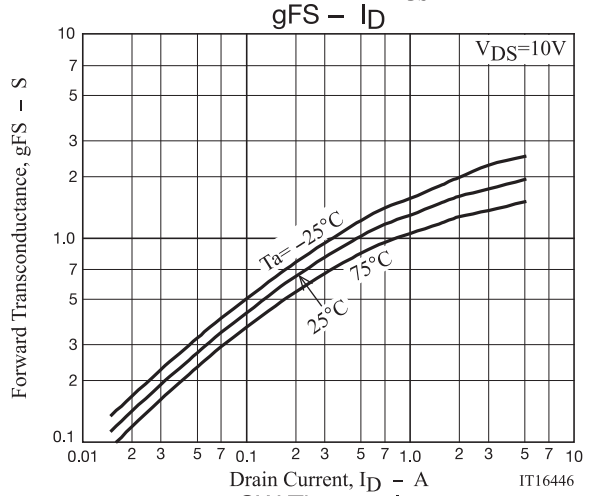


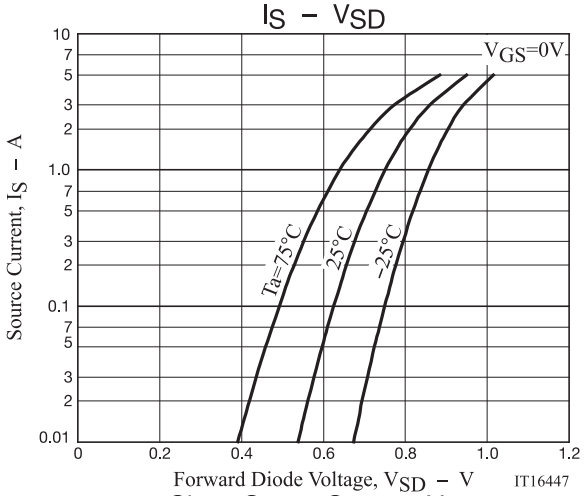


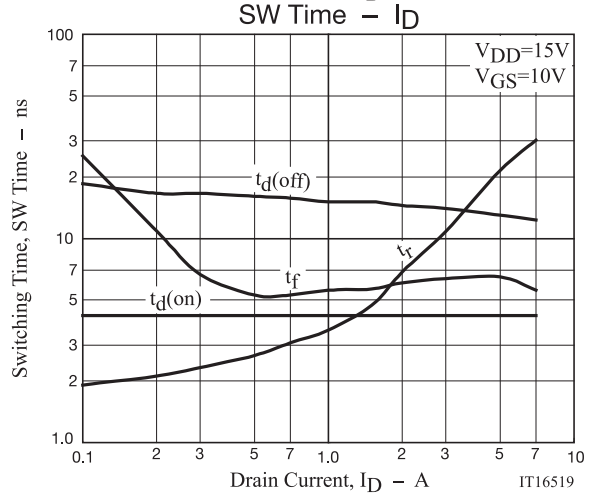


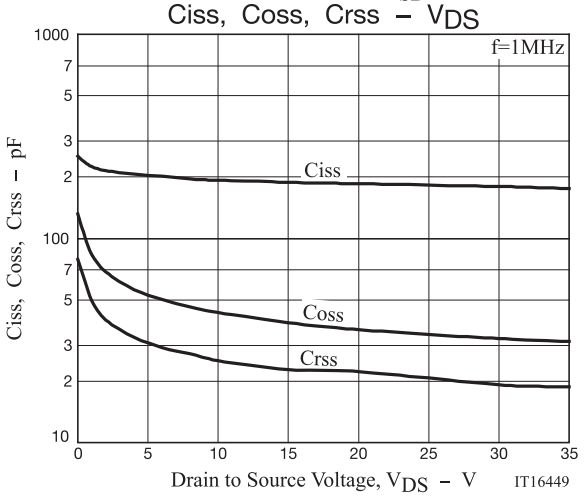


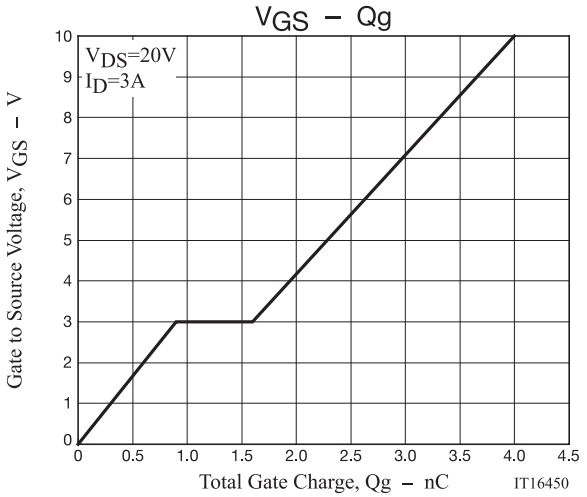


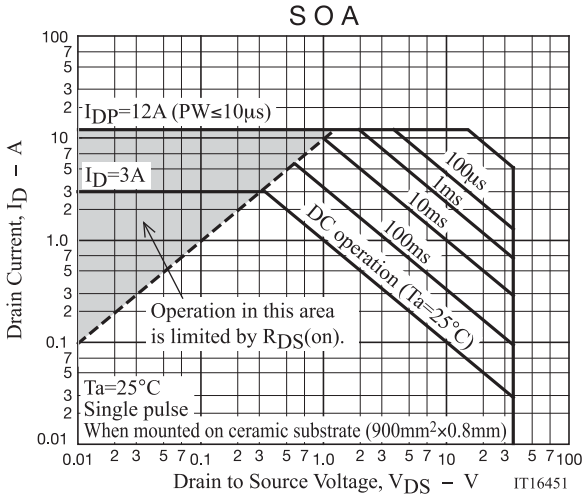


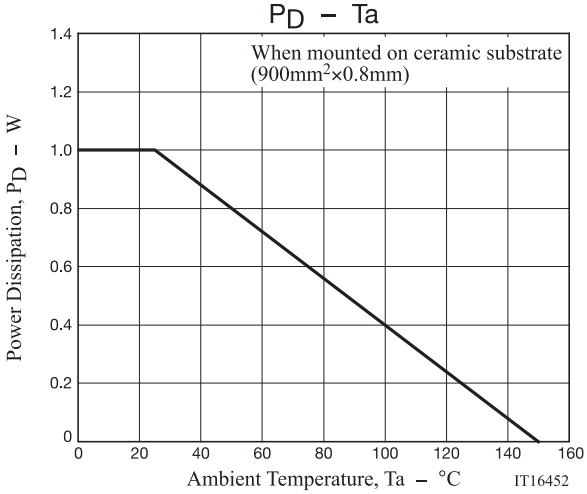


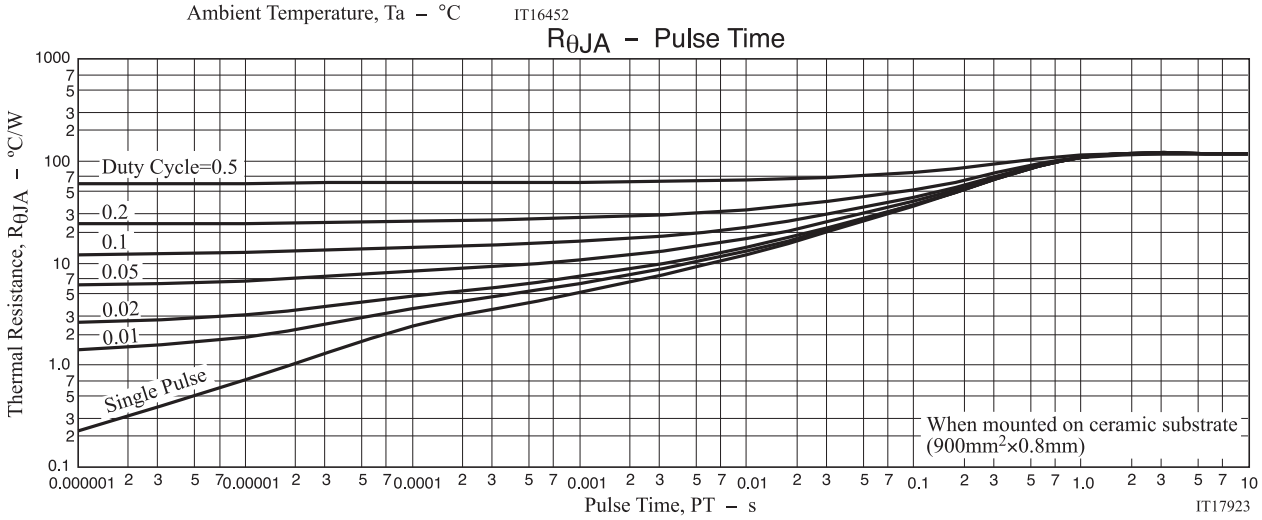








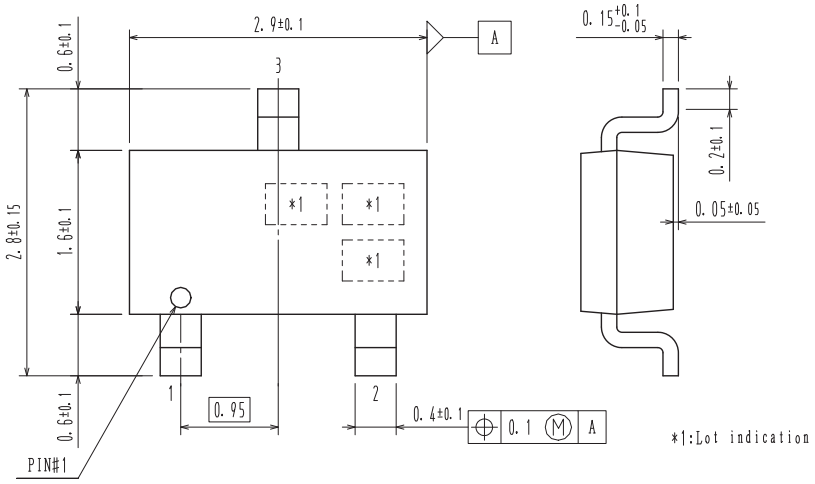


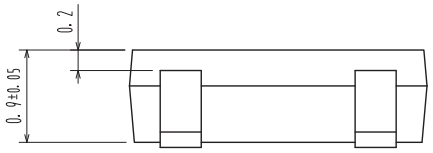


PACKAGE DIMENSIONS

unit : mm

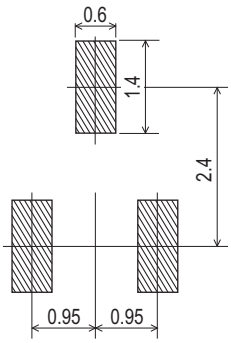
CPH3
CASE 318BA
ISSUE O





1 : Gate
2 : Source
3 : Drain

Recommended Soldering Footprint



ORDERING INFORMATION

Device	Marking	Package	Shipping (Qty / Packing)
CPH3455-TL-H	LM	CPH3 SC-59, SOT-23, TO-236 (Pb-Free / Halogen Free)	3,000 / Tape & Reel
CPH3455-TL-W			

† 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 CPH3455 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.