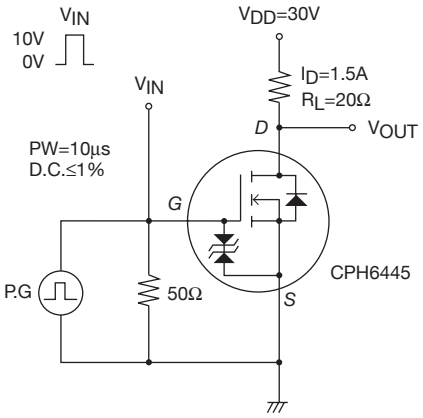
Electrical Characteristics at Ta=25°C

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=1.5A	1.2	2.0		S
Static Drain-to-Source On-State Resistance	R_{DS}(on)1	I_D=1.5A, V_{GS}=10V		92	117	mΩ
	R_{DS}(on)2	I_D=0.7A, V_{GS}=4.5V		120	168	mΩ
	R_{DS}(on)3	I_D=0.7A, V_{GS}=4V		132	185	mΩ
Input Capacitance	Ciss	V_{DS}=20V, f=1MHz		310		pF
Output Capacitance	Coss			40		pF
Reverse Transfer Capacitance	Crss			25		pF
Turn-ON Delay Time	t_d(on)	See specified Test Circuit.		6.0		ns
Rise Time	t_r			5.5		ns
Turn-OFF Delay Time	t_d(off)			27		ns
Fall Time	t_f			13		ns
Total Gate Charge	Qg	V_{DS}=30V, V_{GS}=10V, I_D=3.5A		6.8		nC
Gate-to-Source Charge	Qgs			1.1		nC
Gate-to-Drain “Miller” Charge	Qgd			1.4		nC
Diode Forward Voltage	V_{SD}	I_S=3.5A, V_{GS}=0V		0.85	1.2	V

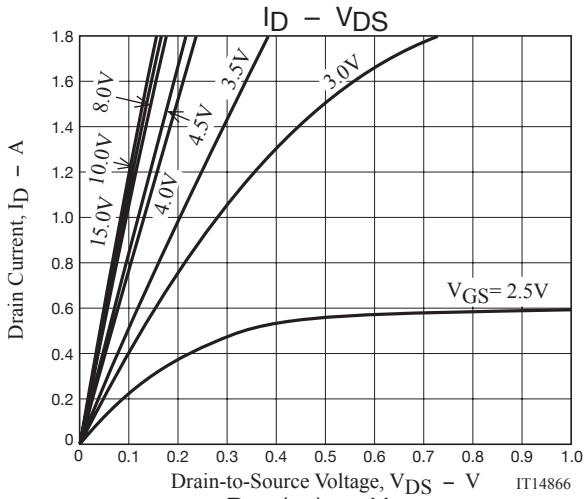
Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

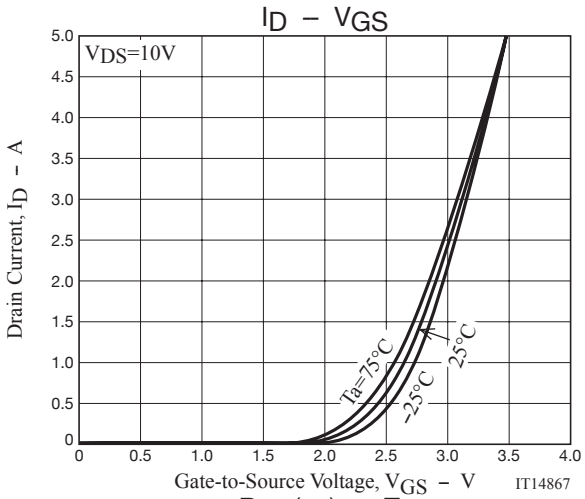
Switching Time Test Circuit

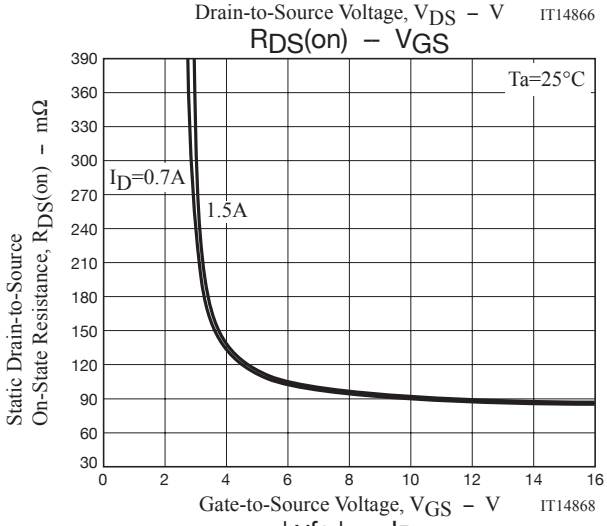


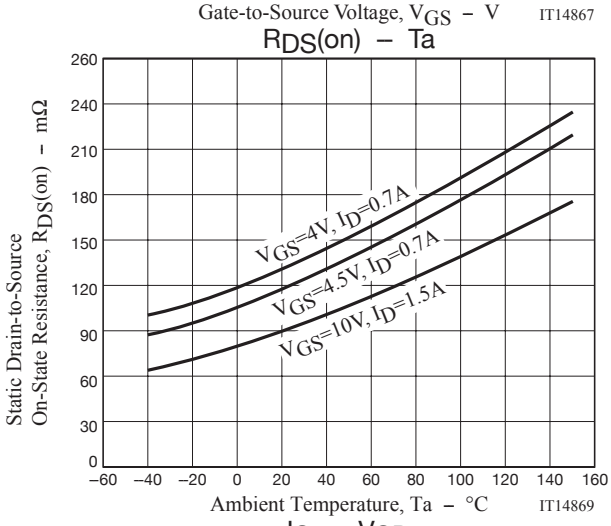
Ordering Information

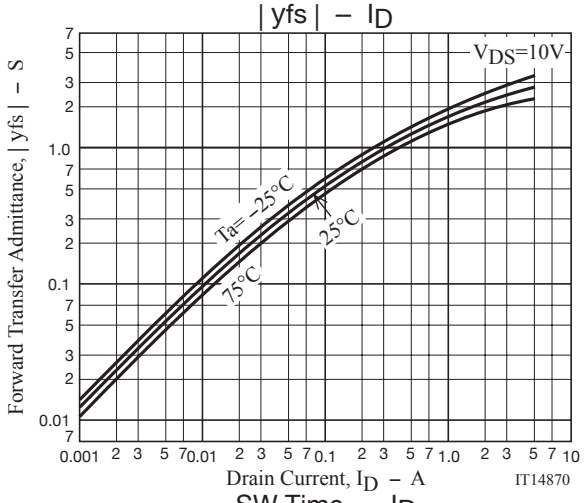
Device	Package	Shipping	memo
CPH6445-TL-E	CPH6	3,000pcs./reel	Pb-Free
CPH6445-TL-W			Pb-Free and Halogen Free

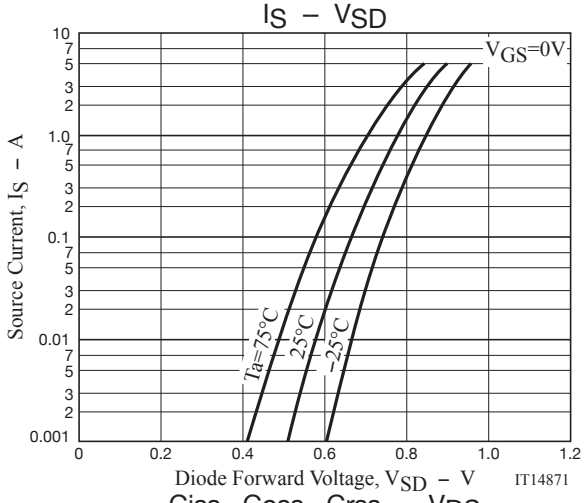


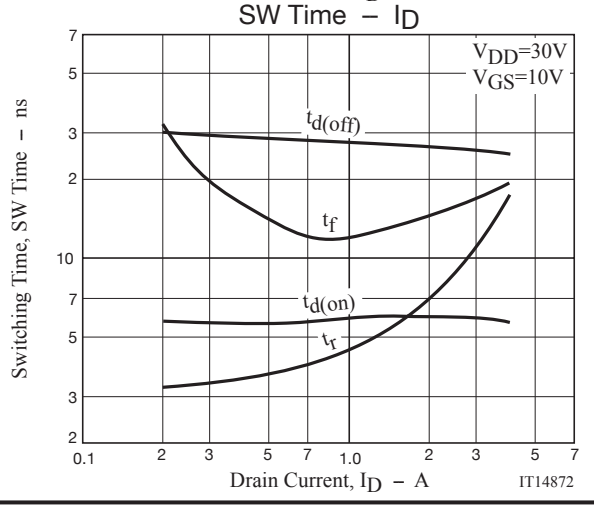


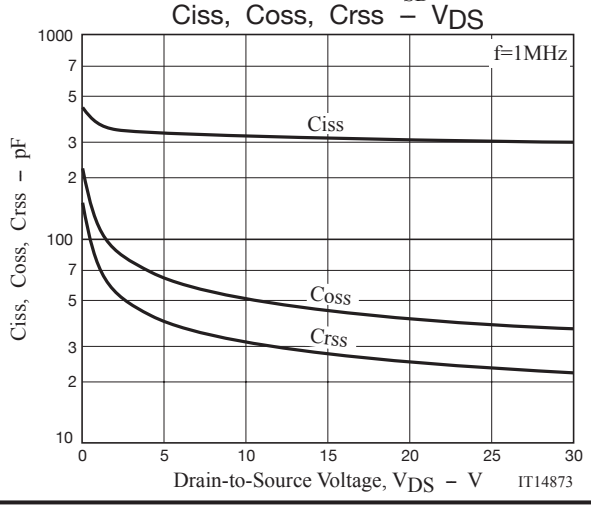


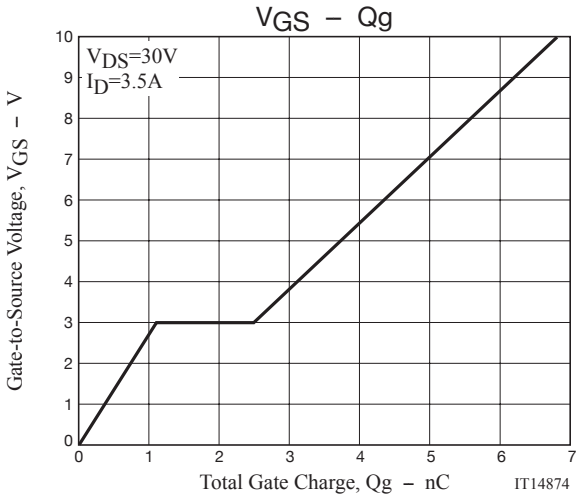


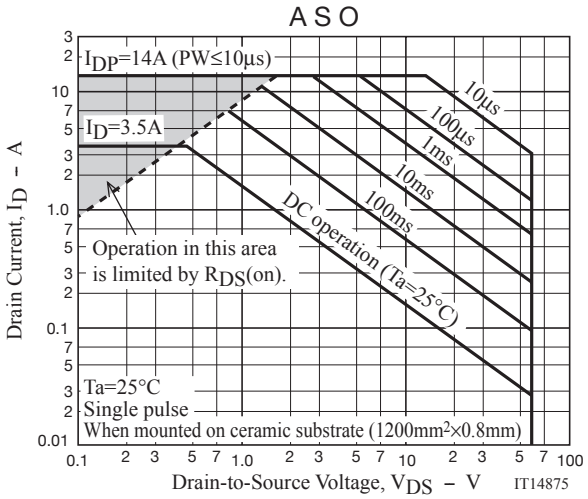


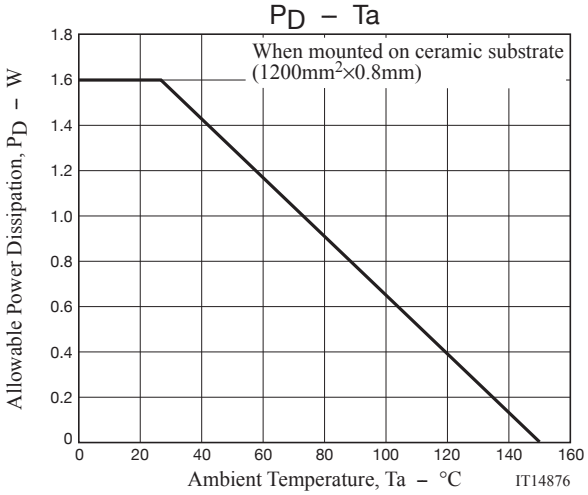






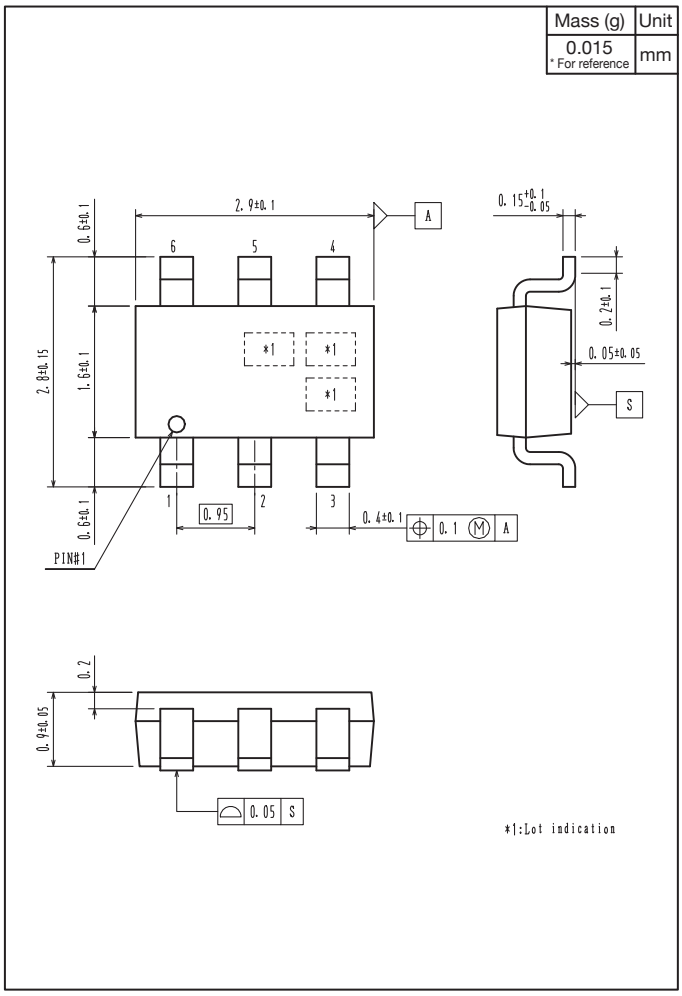




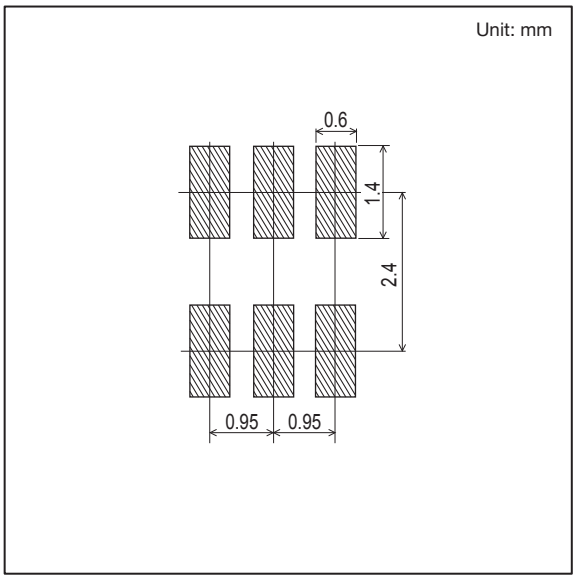


Outline Drawing

CPH6445-TL-E, CPH6445-TL-W



Land Pattern Example



Note on usage : Since the CPH6445 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.