

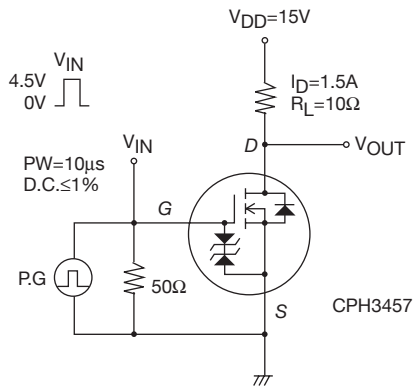
CPH3457

Electrical Characteristics at Ta=25°C

Parameter	Symbol	Conditions	Value			Unit
			min	typ	max	
Drain-to-Source Breakdown Voltage	$V_{(BR)DSS}$	$I_D=1mA, V_{GS}=0V$	30			V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS}=30V, V_{GS}=0V$			1	μA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS}=\pm 8V, V_{DS}=0V$			± 10	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=10V, I_D=1mA$	0.4		1.3	V
Forward Transconductance	g_{FS}	$V_{DS}=10V, I_D=1.5A$		2.7		S
Static Drain-to-Source On-State Resistance	$R_{DS(on)1}$	$I_D=1.5A, V_{GS}=4.5V$		73	95	$m\Omega$
	$R_{DS(on)2}$	$I_D=0.75A, V_{GS}=2.5V$		95	133	$m\Omega$
	$R_{DS(on)2}$	$I_D=0.3A, V_{GS}=1.8V$		135	203	$m\Omega$
Input Capacitance	C_{iss}	$V_{DS}=10V, f=1MHz$		265		pF
Output Capacitance	C_{oss}	$V_{DS}=10V, f=1MHz$		35		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=10V, f=1MHz$		28		pF
Turn-ON Delay Time	$t_{d(on)}$	See specified Test Circuit.		5.1		ns
Rise Time	t_r	See specified Test Circuit.		10		ns
Turn-OFF Delay Time	$t_{d(off)}$	See specified Test Circuit.		137		ns
Fall Time	t_f	See specified Test Circuit.		36		ns
Total Gate Charge	Q_g	$V_{DS}=15V, V_{GS}=4.5V, I_D=3A$		3.5		nC
Gate-to-Source Charge	Q_{gs}	$V_{DS}=15V, V_{GS}=4.5V, I_D=3A$		0.57		nC
Gate-to-Drain "Miller" Charge	Q_{gd}	$V_{DS}=15V, V_{GS}=4.5V, I_D=3A$		0.93		nC
Forward Diode Voltage	V_{SD}	$I_S=3A, V_{GS}=0V$		0.87	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
CPH3457-TL-H	CPH3	3,000pcs./reel	Pb-Free and Halogen Free
CPH3457-TL-W			

