Ordering number : ENA1334

查询"CPH6347"供应商

SANYO Semiconductors

DATA SHEET

P-Channel Silicon MOSFET

CPH6347 — General-Purpose Switching Device Applications

Features

- 1.8V drive.
- Halogen free compliance.

Specifications

Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSS}		−20	V
Gate-to-Source Voltage	V_{GSS}		±12	V
Drain Current (DC)	I_D		−6	A
Drain Current (Pulse)	I_{DP}	PW≤10μs, duty cycle≤1%	−24	A
Allowable Power Dissipation	P_D	When mounted on ceramic substrate (900mm^2×0.8mm)	1.6	W
Channel Temperature	Tch		150	°C
Storage Temperature	Tstg		−55 to +150	°C

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	−20			V
Zero-Gate Voltage Drain Current	I_{DSS}	V_{DS}=−20V, V_{GS}=0V			−1	μA
Gate-to-Source Leakage Current	I_{GSS}	V_{GS}=±8V, V_{DS}=0V			±10	μA
Cutoff Voltage	V_{GS}(off)	V_{DS}=−10V, I_D=−1mA	−0.4		−1.4	V
Forward Transfer Admittance	| yfs |	V_{DS}=−10V, I_D=−3A	4.3	7.3		S
Static Drain-to-Source On-State Resistance	R_{DS}(on)1	I_D=−3A, V_{GS}=−4.5V		30	39	mΩ
	R_{DS}(on)2	I_D=−1.5A, V_{GS}=−2.5V		44	66	mΩ
	R_{DS}(on)3	I_D=−0.6A, V_{GS}=−1.8V		68	102	mΩ

Marking : YZ

Continued on next page.

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Continued from preceding page.
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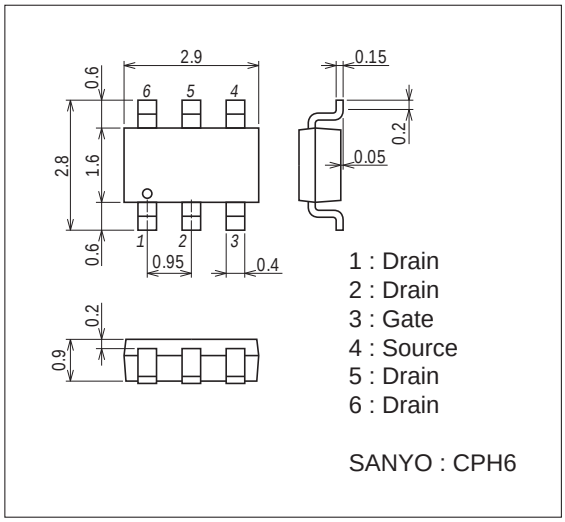
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Input Capacitance	Ciss	V_{DS}=−10V, f=1MHz		860		pF
Output Capacitance	Coss	V_{DS}=−10V, f=1MHz		170		pF
Reverse Transfer Capacitance	Crss	V_{DS}=−10V, f=1MHz		130		pF
Turn-ON Delay Time	t_{d}(on)	See specified Test Circuit.		10		ns
Rise Time	t_{r}	See specified Test Circuit.		48		ns
Turn-OFF Delay Time	t_{d}(off)	See specified Test Circuit.		100		ns
Fall Time	t_{f}	See specified Test Circuit.		78		ns
Total Gate Charge	Qg	V_{DS}=−10V, V_{GS}=−4.5V, I_{D}=−6A		10.5		nC
Gate-to-Source Charge	Qgs	V_{DS}=−10V, V_{GS}=−4.5V, I_{D}=−6A		2.0		nC
Gate-to-Drain “Miller” Charge	Qgd	V_{DS}=−10V, V_{GS}=−4.5V, I_{D}=−6A		3.0		nC
Diode Forward Voltage	V_{SD}	I_{S}=−6A, V_{GS}=0V		−0.82	−1.5	V

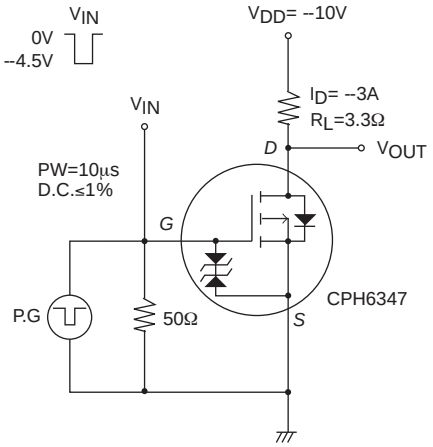
Package Dimensions

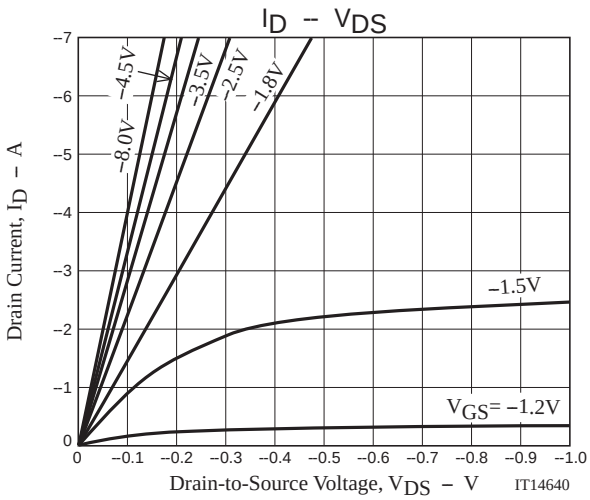
unit : mm (typ)

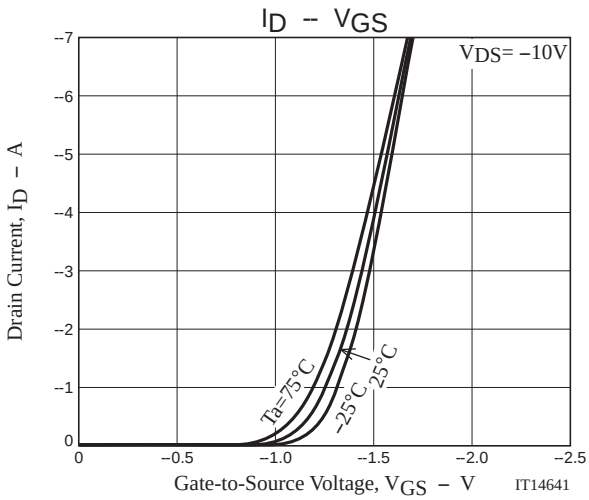
7018A-003



Switching Time Test Circuit







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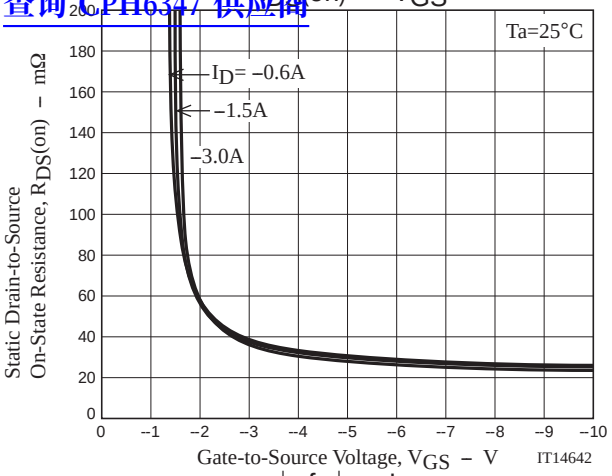
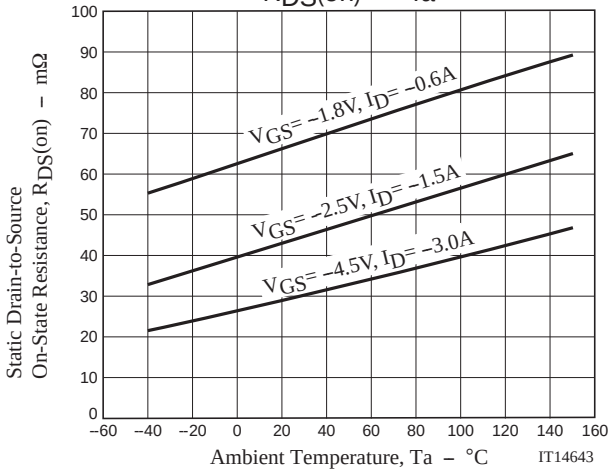
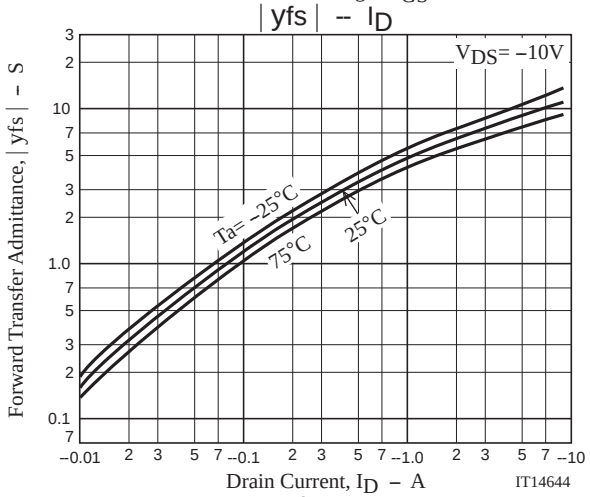
RDS(on) -- VGS



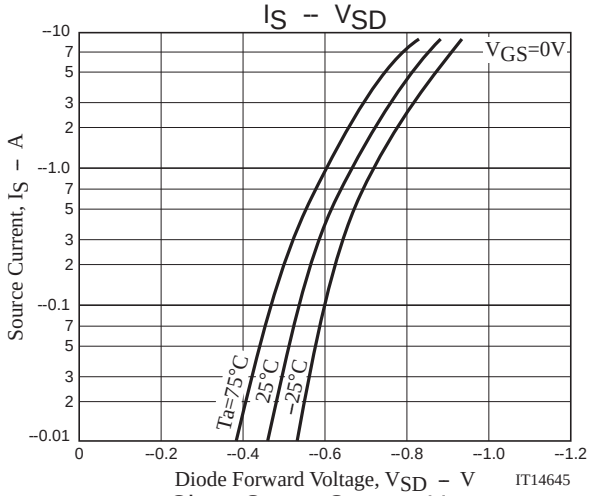
RDS(on) -- Ta



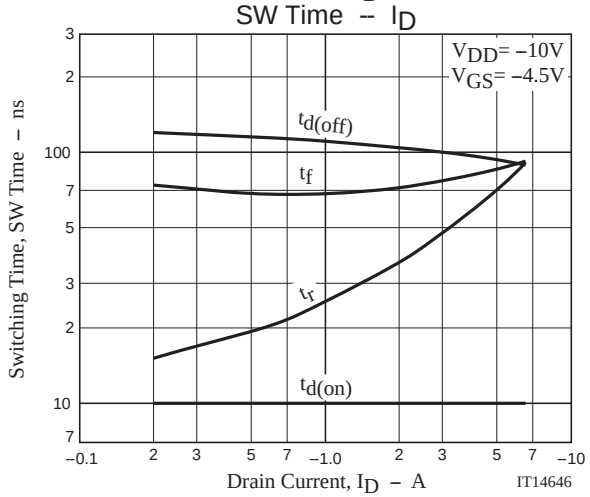
| yfs | -- ID



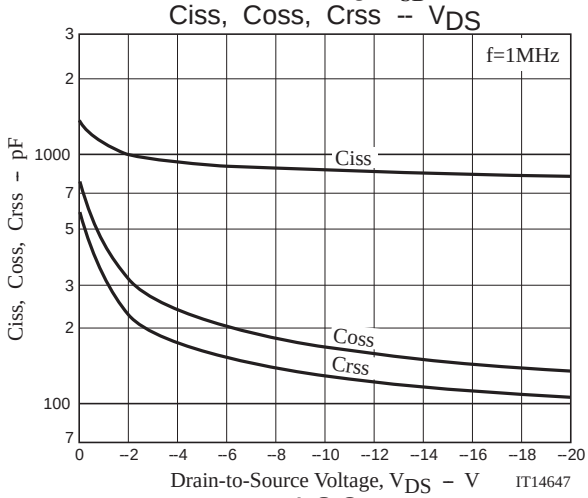
IS -- VSD



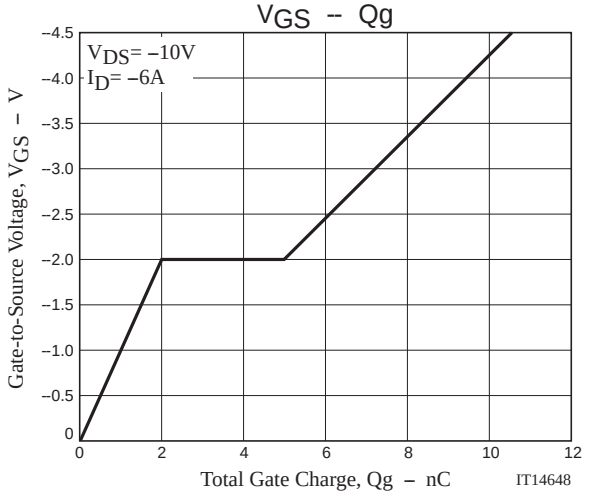
SW Time -- ID



Ciss, Coss, Crss -- VDS



VGS -- Qg



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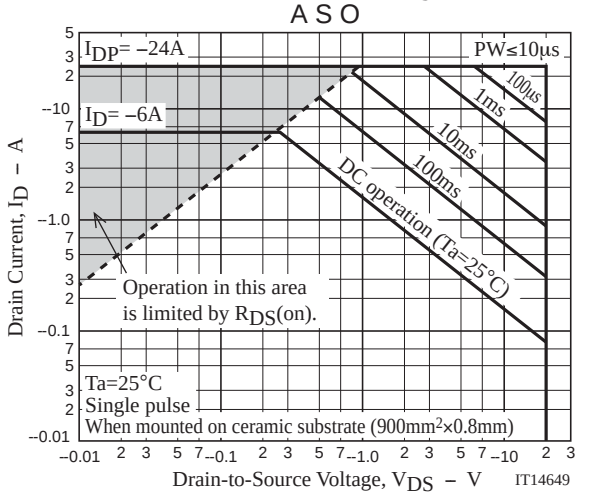

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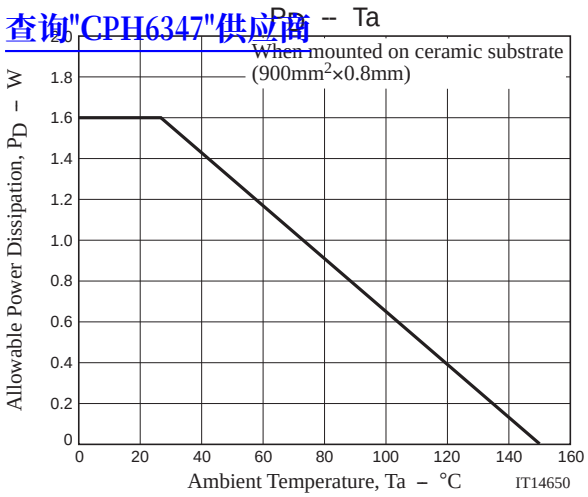

Note on usage : Since the CPH6347 is a MOSFET product, please avoid using this device in the vicinity of highly charged objects.

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