

# **CPH3323**

## **Features**

- Low ON-resistance.
- Ultrahigh-speed switching.
- 4V drive.

# **Specifications**

#### Absolute Maximum Ratings at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V <sub>DSS</sub>		-60	V
Gate-to-Source Voltage	VGSS		±20	V
Drain Current (DC)	ID		-1	Α
Drain Current (Pulse)	IDP	PW≤10μs, duty cycle≤1%	-4	Α
Allowable Power Dissipation	PD	Mounted on a ceramic board (900mm <sup>2</sup> X0.8mm)	1	W
Channel Temperature	Tch		150	°C
Storage Temperature	Tstg		-55 to +150	°C

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

Parameter	Symbol	Conditions	Ratings			Linit
			min	typ	max	Unit
Drain-to-Source Breakdown Voltage	V(BR)DSS	ID=-1mA, VGS=0	-60			V
Zero-Gate Voltage Drain Current	IDSS	V <sub>DS</sub> =-60V, V <sub>GS</sub> =0			-1	μΑ
Gate-to-Source Leakage Current	IGSS	VGS=±16V, VDS=0			±10	μΑ
Cutoff Voltage	VGS(off)	V <sub>DS</sub> =-10V, I <sub>D</sub> =-1mA	-1.2		-2.6	V
Forward Transfer Admittance	yfs	V <sub>DS</sub> =-10V, I <sub>D</sub> =-0.5A	0.6	1.2		S
Static Drain-to-Source On-State Resistance	RDS(on)1	ID=-0.5A, VGS=-10V		0.58	0.76	Ω
	R <sub>DS</sub> (on)2	ID=-0.5A, VGS=-4V		0.78	1.1	Ω
Input Capacitance	Ciss	V <sub>DS</sub> =-20V, f=1MHz		180		pF
Output Capacitance	Coss	V <sub>DS</sub> =-20V, f=1MHz		15		pF
Reverse Transfer Capacitance	Crss	V <sub>DS</sub> =-20V, f=1MHz		11		pF
Turn-ON Delay Time	t <sub>d</sub> (on)	See specified Test Circuit.		8		ns
Rise Time	tr	See specified Test Circuit.		3		ns
Turn-OFF Delay Time	t <sub>d</sub> (off)	See specified Test Circuit.		30		ns
Fall Time	tf	See specified Test Circuit.		25		ns

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