

CPH3327

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 _{DSS}		-100	V
Gate-to-Source Voltage	V _{GSS}		±20	V
Drain Current (DC)	I _D		-0.6	A
Drain Current (Pulse)	I _{DP}	PW≤10μs, duty cycle≤1%	-2.4	A
Allowable Power Dissipation	P _D	Mounted on a ceramic board (900mm²×0.8mm)	1	W
Channel Temperature	T _{ch}		150	°C
Storage Temperature	T _{stg}		-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} =0	-100			V
Zero-Gate Voltage Drain Current	I _{DSS}	V _{DS} =-100V, V _{GS} =0			-1	μA
Gate-to-Source Leakage Current	I _{GSS}	V _{GS} =±16V, V _{DS} =0			±10	μA
Cutoff Voltage	V _{GS(off)}	V _{DS} =-10V, I _D =-1mA	-1.2		-2.6	V
Forward Transfer Admittance	y _{fs}	V _{DS} =-10V, I _D =-300mA	0.5	1.0		S
Static Drain-to-Source On-State Resistance	R _{DS(on)1}	I _D =-300mA, V _{GS} =-10V		1.1	1.45	Ω
	R _{DS(on)2}	I _D =-300mA, V _{GS} =-4V		1.2	1.7	Ω
Input Capacitance	C _{iss}	V _{DS} =-20V, f=1MHz		245		pF
Output Capacitance	C _{oss}	V _{DS} =-20V, f=1MHz		16		pF
Reverse Transfer Capacitance	C _{rss}	V _{DS} =-20V, f=1MHz		13		pF
Turn-ON Delay Time	t _{d(on)}	See specified Test Circuit.		8.5		ns
Rise Time	t _r	See specified Test Circuit.		2.7		ns
Turn-OFF Delay Time	t _{d(off)}	See specified Test Circuit.		36		ns
Fall Time	t _f	See specified Test Circuit.		16		ns

Marking : YC

- Any and all TY products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your TY representative nearest you before using any TY products described or contained herein in such applications.
- TY assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all TY products described or contained herein.