

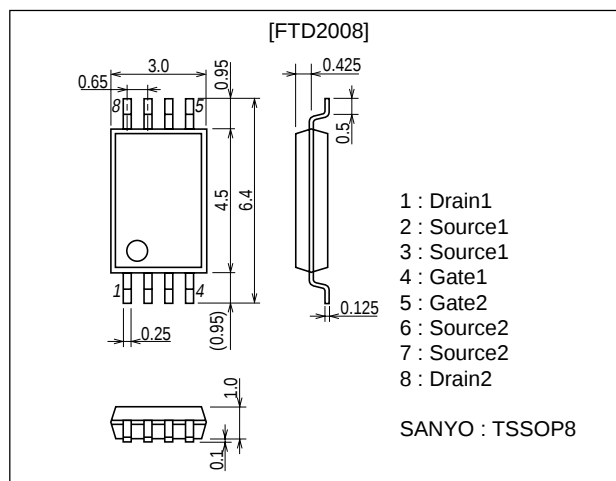
**FTD2008****DC / DC Converter Applications****Features**

- Low ON-resistance.
- 4V drive.
- Mounting height 1.1mm.
- Composite type, facilitating high-density mounting.

Package Dimensions

unit : mm

2155A

**Specifications****Absolute Maximum Ratings** at Ta=25°C

Parameter	Symbol	Conditions	Ratings	Unit
Drain-to-Source Voltage	V_{DSS}		60	V
Gate-to-Source Voltage	V_{GSS}		± 20	V
Drain Current (DC)	I_D		1.5	A
Drain Current (Pulse)	I_{DP}	$PW \leq 10\mu s$, duty cycle $\leq 1\%$	6	A
Allowable Power Dissipation	P_D	Mounted on a ceramic board (1000mm ² X0.8mm) 1unit	0.8	W
Total Dissipation	P_T	Mounted on a ceramic board (1000mm ² X0.8mm)	1.0	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	$V_{(BR)DSS}$	$I_D=1mA$, $V_{GS}=0$	60			V
Zero-Gate Voltage Drain Current	I_{DSS}	$V_{DS}=60V$, $V_{GS}=0$			10	μA
Gate-to-Source Leakage Current	I_{GSS}	$V_{GS}=\pm 16V$, $V_{DS}=0$			± 10	μA
Cutoff Voltage	$V_{GS(off)}$	$V_{DS}=10V$, $I_D=1mA$	1.0		2.4	V
Forward Transfer Admittance	$ y_{fs} $	$V_{DS}=10V$, $I_D=0.8A$	1.4	2.0		S

Marking : D2008

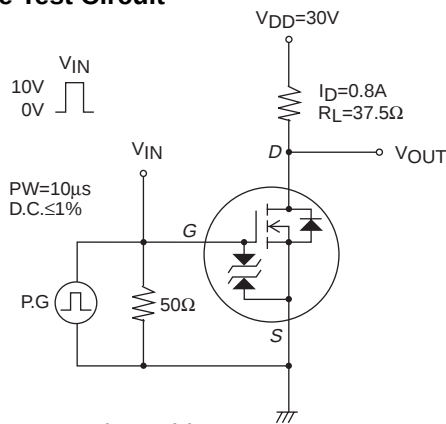
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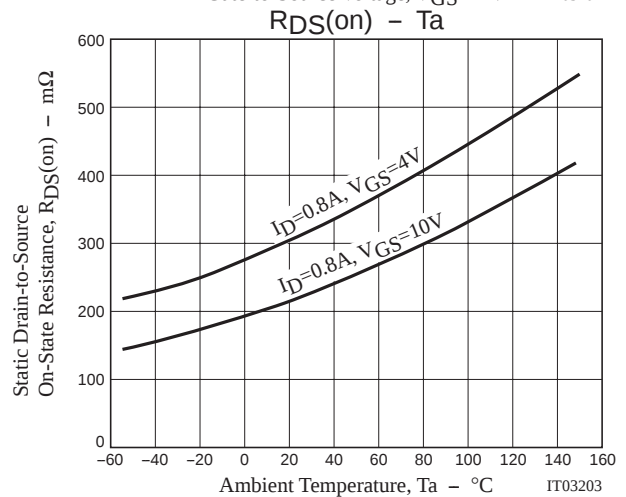
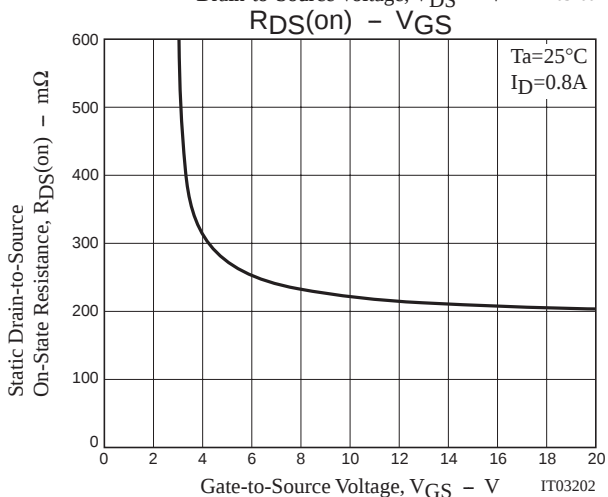
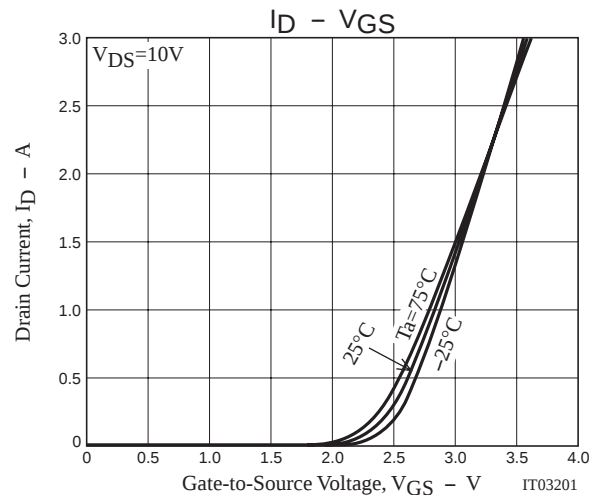
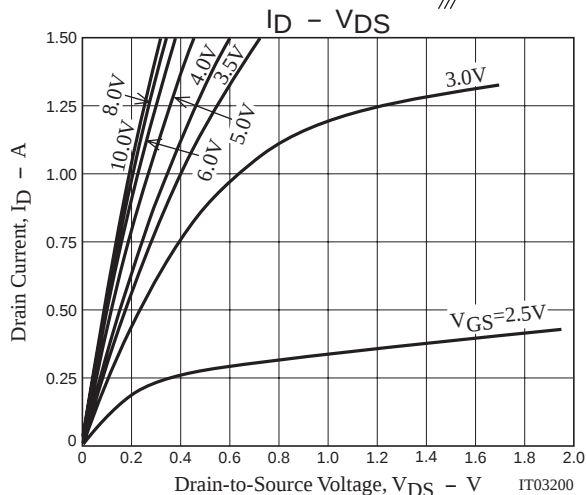
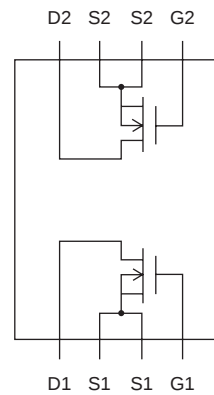
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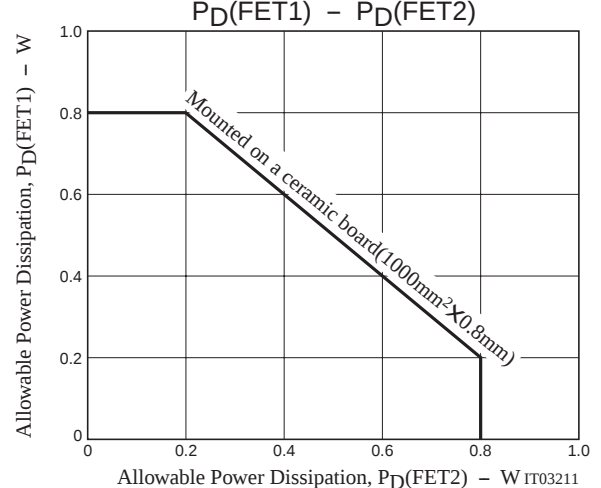
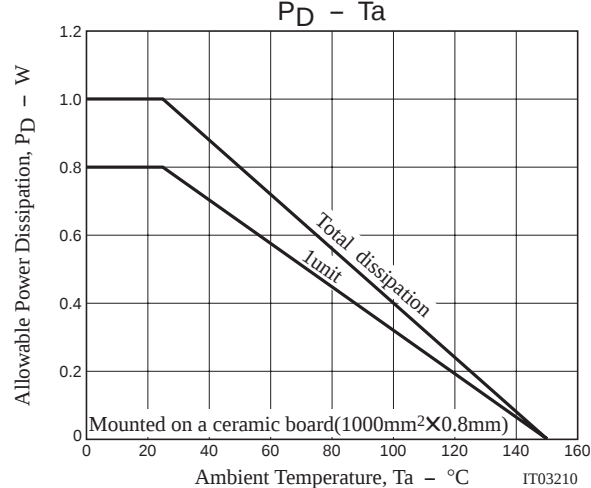
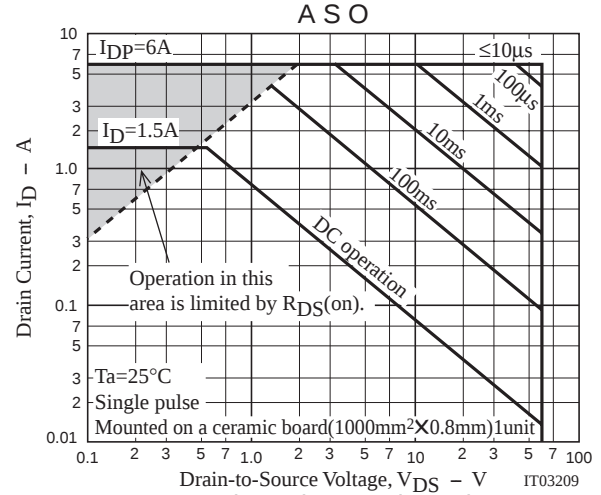
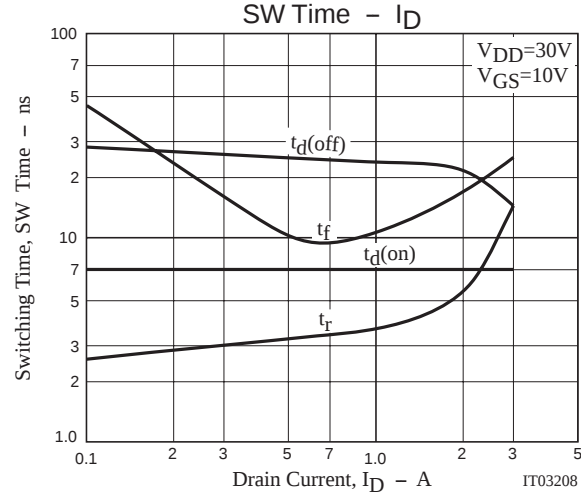
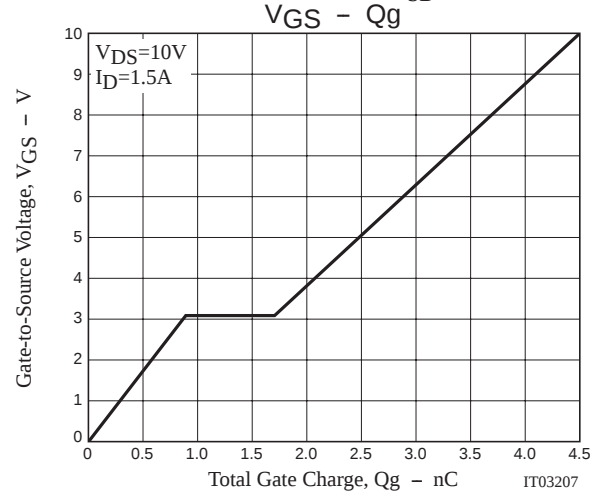
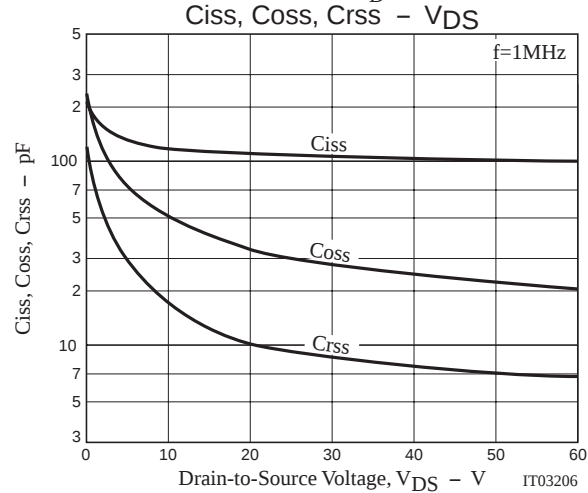
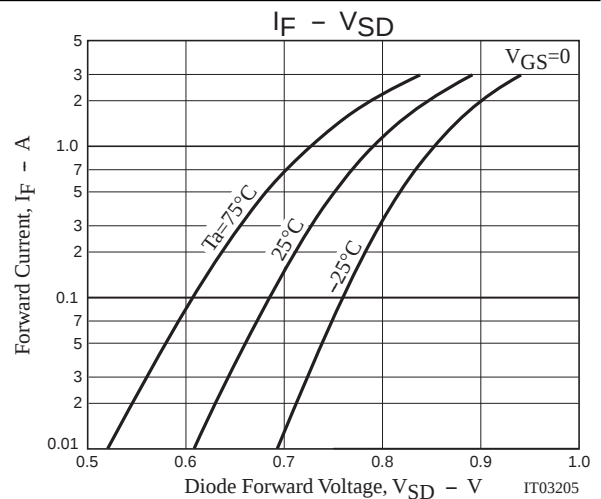
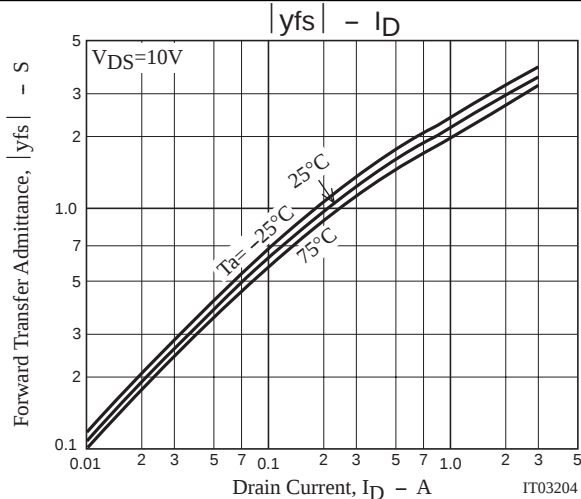
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Static Drain-to-Source On-State Resistance	$R_{DS(on)1}$	$I_D=0.8A, V_{GS}=10V$		240	320	$m\Omega$
	$R_{DS(on)2}$	$I_D=0.8A, V_{GS}=4V$		320	440	$m\Omega$
Input Capacitance	C_{iss}	$V_{DS}=20V, f=1MHz$		110		pF
Output Capacitance	C_{oss}	$V_{DS}=20V, f=1MHz$		35		pF
Reverse Transfer Capacitance	C_{rss}	$V_{DS}=20V, f=1MHz$		10		pF
Turn-ON Delay Time	$t_d(on)$	See specified Test Circuit		7		ns
Rise Time	t_r	See specified Test Circuit		4		ns
Turn-OFF Delay Time	$t_d(off)$	See specified Test Circuit		24		ns
Fall Time	t_f	See specified Test Circuit		11		ns
Total Gate Charge	Q_g	$V_{DS}=10V, V_{GS}=10V, I_D=1.5A$		4.5		nC
Gate-to-Source Charge	Q_{gs}	$V_{DS}=10V, V_{GS}=10V, I_D=1.5A$		0.9		nC
Gate-to-Drain "Miller" Charge	Q_{gd}	$V_{DS}=10V, V_{GS}=10V, I_D=1.5A$		0.8		nC
Diode Forward Voltage	V_{SD}	$I_S=1.5A, V_{GS}=0$		0.82	1.2	V

Switching Time Test Circuit



Electrical Connection





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