

### ● Structure

## ●Features

- ## ●Applications

●External dimensions (Unit : mm)



- Inner circuit



\*1  $P_w \leq 10\mu s$ , Duty cycle  $\leq 1\%$   
\*2 Mounted on a ceramic board

●Thermal resistance

\* Mounted on a ceramic board

## Transistors

## ●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Gate-source leakage	$I_{GSS}$	—	—	10	$\mu A$	$V_{GS}=12V, V_{DS}=0V$
Drain-source breakdown voltage	$V_{(BR)DSS}$	30	—	—	V	$I_D=1mA, V_{GS}=0V$
Zero gate voltage drain current	$I_{DSS}$	—	—	1	$\mu A$	$V_{DS}=30V, V_{GS}=0V$
Gate threshold voltage	$V_{GS(th)}$	0.5	—	1.5	V	$V_{DS}=10V, I_D=1mA$
Static drain-source on-state resistance	$R_{DS(on)}$ *	—	89	125	$m\Omega$	$I_D=2A, V_{GS}=4.5V$
		—	94	132	$m\Omega$	$I_D=2A, V_{GS}=4V$
		—	138	194	$m\Omega$	$I_D=2A, V_{GS}=2.5V$
Forward transfer admittance	$ Y_{fs} $ *	2.0	—	—	S	$V_{DS}=10V, I_D=2A$
Input capacitance	$C_{iss}$	—	135	—	pF	$V_{DS}=10V$
Output capacitance	$C_{oss}$	—	35	—	pF	$V_{GS}=0V$
Reverse transfer capacitance	$C_{rss}$	—	25	—	pF	$f=1MHz$
Turn-on delay time	$t_{d(on)}$ *	—	8	—	ns	$V_{DD}=15V$
Rise time	$t_r$ *	—	11	—	ns	$I_D=1A$
Turn-off delay time	$t_{d(off)}$ *	—	17	—	ns	$V_{GS}=4.5V$
Fall time	$t_f$ *	—	9	—	ns	$R_L=15\Omega$ $R_G=10\Omega$
Total gate charge	$Q_g$ *	—	2.4	3.3	nC	$V_{DD}=15V$
Gate-source charge	$Q_{gs}$ *	—	0.5	—	nC	$V_{GS}=4.5V$
Gate-drain charge	$Q_{gd}$ *	—	0.7	—	nC	$I_D=2A$

\*Pulsed

## ●Body diode characteristics (Source-drain) (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_{SD}$ *	—	—	1.2	V	$I_S=4A, V_{GS}=0V$

\*Pulsed

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