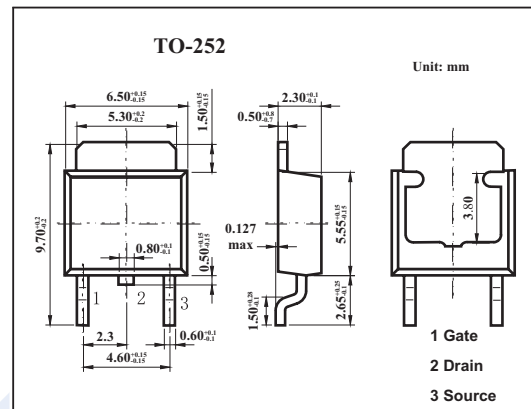
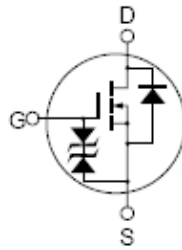


## Silicon N-Channel MOSFET 2SK2796S

### ■ Features

- Low on-resistance
- $R_{bs} = 0.12 \Omega$  typ.
- High speed switching



### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Drain to source voltage	$V_{DS}$	60	V
Gate to source voltage	$V_{GS}$	$\pm 20$	V
Drain current	$I_D$	5	A
	$I_{DP}^*$	20	A
Power dissipation	$P_D$	20	W
Channel temperature	$T_{ch}$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-55 to +150	$^\circ\text{C}$

\*  $PW \leq 10 \mu\text{s}$ , Duty Cycle  $\leq 1\%$

### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Drain source breakdown voltage	$V_{DS}$	$I_D=10\text{mA}, V_{GS}=0\text{V}$	60			V
Drain cut-off current	$I_{DSS}$	$V_{DS}=60\text{V}, V_{GS}=0$			10	$\mu\text{A}$
Gate leakage current	$I_{GSS}$	$V_{GS}=\pm 16\text{V}, V_{DS}=0$			$\pm 10$	$\mu\text{A}$
Gate to source cutoff voltage	$V_{GS(off)}$	$V_{DS}=10\text{V}, I_D=1\text{mA}$	1.0		2.0	V
Forward transfer admittance	$ Y_{fs} $	$V_{DS}=10\text{V}, I_D=3\text{A}$	2.5	4.0		S
Drain to source on-state resistance	$R_{DS(on)}$	$V_{GS}=10\text{V}, I_D=3\text{A}$		0.12	0.16	$\Omega$
		$V_{GS}=4\text{V}, I_D=3\text{A}$		0.16	0.25	$\Omega$
Input capacitance	$C_{iss}$	$V_{DS}=10\text{V}, V_{GS}=0, f=1\text{MHz}$		180		pF
Output capacitance	$C_{oss}$			90		pF
Reverse transfer capacitance	$C_{rss}$			30		pF
Turn-on delay time	$t_{on}$				9	ns
Rise time	$t_r$	$I_D=3\text{A}, V_{GS(on)}=10\text{V}, R_L=10\Omega$		25		ns
Turn-off delay time	$t_{off}$			35		ns
Fall time	$t_f$			55		ns