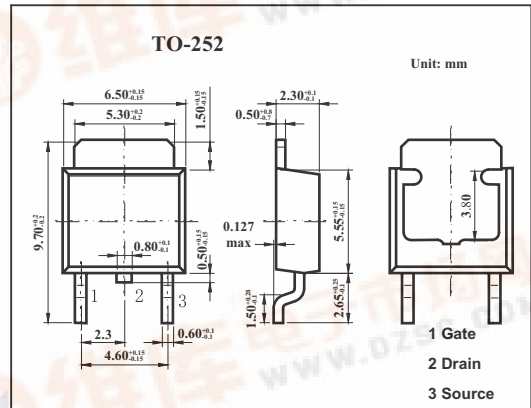
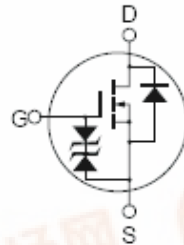


SMD Type MOSFET

Silicon N-Channel MOSFET
2SK2796S

Features

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



Absolute Maximum Ratings $T_a = 25^\circ C$

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

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

Electrical Characteristics $T_a = 25^\circ C$

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

