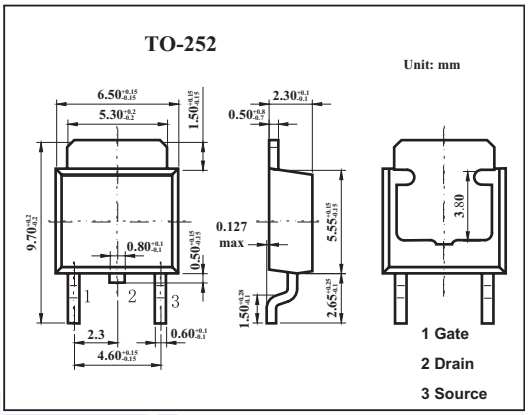
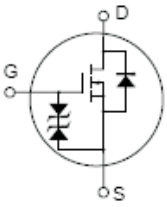
Silicon N-Channel MOSFET
2SK2084S

■ Features

- Low on-resistance
- High speed switching
- Low drive current
- Suitable for Switching regulator, DC - DC converter





■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Drain to source voltage	V_{DSS}	20	V
Gate to source voltage	V_{GSS}	±20	V
Drain current	I_D	7	A
Power dissipation	P_D	20	W
Channel temperature	T_{ch}	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I_{DSS}	V_{DS}=16V,V_{GS}=0			100	μA
Gate leakage current	I_{GSS}	V_{GS}=±16V,V_{DS}=0			±10	μA
Gate to source cutoff voltage	$V_{GS(off)}$	V_{DS}=10V,I_D=1mA	1.0		2.5	V
Forward transfer admittance	$\|Y_{fs}\|$	V_{DS}=10V,I_D=4A	5	9		S
Drain to source on-state resistance	$R_{DS(on)}$	V_{GS}=10V,I_D=4A		0.04	0.053	Ω
		V_{GS}=4V,I_D=4A		0.058	0.075	Ω
Input capacitance	C_{iss}	V_{DS}=10V,V_{GS}=0,f=1MHZ		800		pF
Output capacitance	C_{oss}			680		pF
Reverse transfer capacitance	C_{rss}			165		pF
Turn-on delay time	$t_{d(on)}$	I_D=4A,$V_{GS(on)}$=10V,R_L=5Ω		15		ns
Rise time	tr			60		ns
Turn-off delay time	$t_{d(off)}$			100		ns
Fall time	tf			80		ns