

2SK2660(Tentative)

Silicon N-Channel Power F-MOS

■ Features

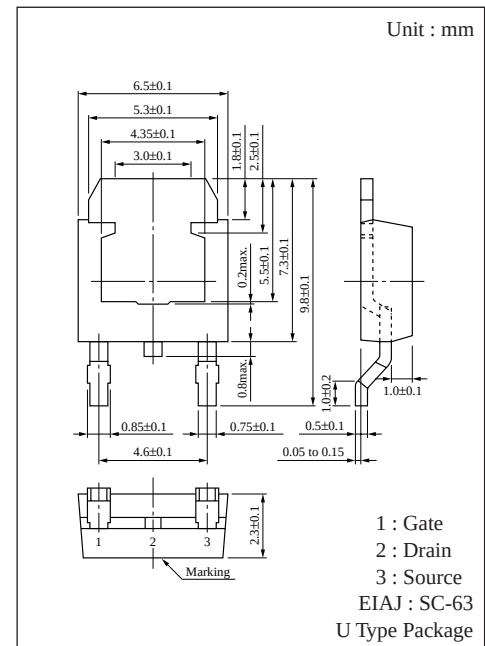
- High-speed switching
- High drain-source voltage (V_{DSS})

■ Applications

- High-speed switching

■ Absolute Maximum Ratings ($T_C = 25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Drain-Source breakdown voltage	V_{DSS}	200	V
Gate-Source voltage	V_{GSS}	± 30	V
Drain current	DC	I_D	± 4 A
	Pulse	I_{DP}	± 8 A
Allowable power dissipation	$T_C = 25^\circ\text{C}$	P_D	10 W
	$T_a = 25^\circ\text{C}$		0.75
Channel temperature	T_{ch}	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to $+150$	$^\circ\text{C}$



■ Electrical Characteristics ($T_C = 25^\circ\text{C}$)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Drain-Source cut-off current	I_{DSS}	$V_{DS}=160\text{V}, V_{GS}=0$			0.1	m A
Gate-Source leakage current	I_{GSS}	$V_{GS}=\pm 30\text{V}, V_{DS}=0$			± 1	μA
Drain-Source breakdown voltage	V_{DSS}	$I_D=1\text{mA}, V_{GS}=0$	200			V
Gate threshold voltage	V_{th}	$V_{DS}=25\text{V}, I_D=1\text{mA}$	1		5	V
Drain-Source ON-resistance	$R_{DS(on)}$	$V_{GS}=10\text{V}, I_D=2\text{A}$		0.8	1.1	Ω
Forward transadmittance	$ Y_{fs} $	$V_{DS}=25\text{V}, I_D=2\text{A}, f=1\text{MHz}$	0.8	1.6		S
Input capacitance	C_{iss}	$V_{DS}=20\text{V}, V_{GS}=0, f=1\text{MHz}$		300		pF
Output capacitance	C_{oss}			60		pF
Feedback capacitance	C_{rss}			10		pF
Turn-on time	t_{on}	$V_{GS}=10\text{V}, I_D=2\text{A}$ $V_{DD}=100\text{V}, R_L=200\Omega$		30		ns
Fall time	t_f			50		ns
Turn-off time (delay time)	$t_{d(off)}$			20		ns