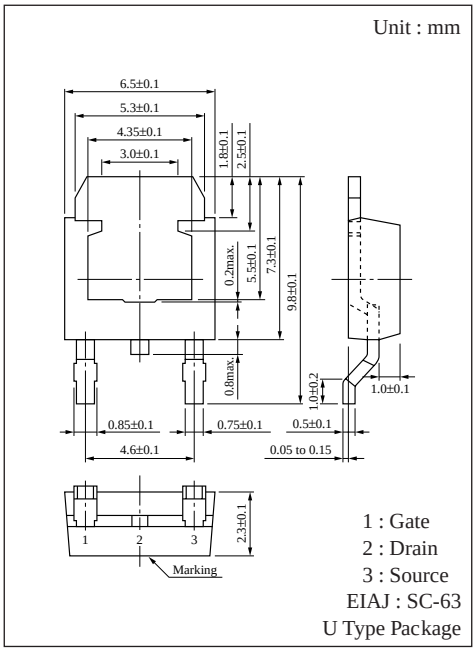
2SK2797(Tentative)

Silicon N-Channel MOS

For high-speed switching
For high-frequency power amplification



■ Features

- Avalanche energy capability guaranteed : EAS > 10mJ
- High-speed switching : t_f=15ns
- No secondary breakdown

■ Absolute Maximum Ratings (Tc = 25˚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	±2	A
	Pulse	I_{DP}	±4	A
Avalanche energy capability		EAS *1	10	mJ
Allowable power dissipation		P_D *2	10	W
Channel temperature		T_{ch}	150	˚C
Storage temperature		T_{stg}	–55 to +150	˚C

* 1 Avalanche energy capability guaranteed * 2 T_C= 25˚C

■ Electrical Characteristics (Tc = 25˚C)

Parameter		Symbol	Condition	Min	Typ	Max	Unit
Drain-Source cut-off current		I_{DSS}	V_{DS}=160V, V_{GS}= 0			100	μ A
Drain reverse current	Continuous	I_{DR}				2	A
	Pulse	I_{DRP}				4	A
Gate-Source leakage current		I_{GSS}	V_{GS}=± 30V, V_{DS}= 0			±1	μ A
Drain-Source breakdown voltage		V_{DSS}	I_D=1mA, V_{GS}= 0	200			V
Gate threshold voltage		V_{th}	V_{DS}= 25V, I_D=1mA	1		5	V
Diode forward voltage		V_{DSF}	I_{DR}= 2A, V_{GS}= 0			–1.6	V
Drain-Source ON-resistance		$R_{DS(on)}$	V_{GS}=10V, I_D=1A		2.1	3.5	Ω
Forward transadmittance		$\|Y_{fs}\|$	V_{DS}= 25V, I_D=1A	0.5	1		S
Input capacitance		C_{iss}	V_{DS}= 20V, V_{GS}= 0, f=1MHz		140		pF
Output capacitance		C_{oss}			30		pF
Feedback capacitance		C_{rss}			5		pF
Turn-on time (delay time)		$t_{d(on)}$	V_{GS}=10V, I_D=1A R_L=100Ω, V_{DD}=100V		10		ns
Rise time		t_r			10		ns
Fall time		t_f			20		ns
Turn-off time (delay time)		$t_{d(off)}$			15		ns
Channel-Case heat resistance		$R_{th(ch-c)}$				12.5	˚C/W