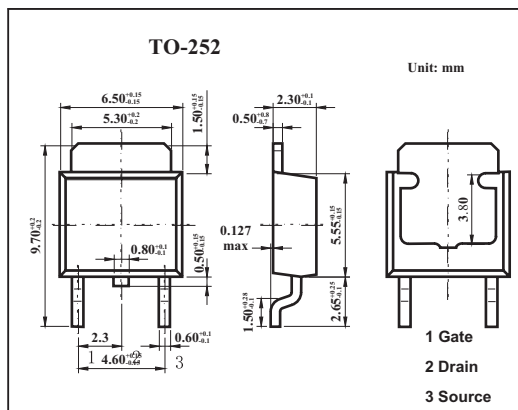


# 2SK3483

## N-CHANNEL MOSFET FOR SWITCHING

■ Features

- Super low on-state resistance:
  - R<sub>DS(on)1</sub> = 52m Ω MAX. (V<sub>GS</sub> = 10 V, I<sub>D</sub> = 14A)
  - R<sub>DS(on)2</sub> = 59m Ω MAX. (V<sub>GS</sub> = 4.5 V, I<sub>D</sub> = 14A)
- Low C<sub>iss</sub>: C<sub>iss</sub> = 2300 pF TYP.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain to source voltage	V <sub>DSS</sub>	100	V
Gate to source voltage	V <sub>GSS</sub>	±20	V
Drain current	I <sub>D</sub>	±28	A
	I <sub>dp</sub> *	±60	A
Power dissipation	P <sub>D</sub>	T <sub>C</sub> =25°C	40
		T <sub>A</sub> =25°C	1.0
Channel temperature	T <sub>ch</sub>	150	°C
Storage temperature	T <sub>stg</sub>	-55 to +150	°C

\* PW ≤ 10 μ s, Duty Cycle ≤ 1%

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Drain cut-off current	I <sub>DSS</sub>	V <sub>DS</sub> =100V, V <sub>GS</sub> =0			10	μ A
Gate leakage current	I <sub>GSS</sub>	V <sub>GS</sub> = ±20V, V <sub>DS</sub> =0			±10	μ A
Gate cutoff voltage	V <sub>GS(off)</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =1mA	1.5	2.0	2.5	V
Forward transfer admittance	Y <sub>fs</sub>	V <sub>DS</sub> =10V, I <sub>D</sub> =14A	9.0	18		S
Drain to source on-state resistance	R <sub>DS(on)1</sub>	V <sub>GS</sub> =10V, I <sub>D</sub> =14A		41	52	m Ω
	R <sub>DS(on)2</sub>	V <sub>GS</sub> =4.5V, I <sub>D</sub> =14A		45	59	m Ω
Input capacitance	C <sub>iss</sub>	V <sub>DS</sub> =10V, V <sub>GS</sub> =0, f=1MHZ		2300		pF
Output capacitance	C <sub>oss</sub>			230		pF
Reverse transfer capacitance	C <sub>rss</sub>			120		pF
Turn-on delay time	t <sub>on</sub>	I <sub>D</sub> =14A, V <sub>GS(on)</sub> =10V, R <sub>G</sub> =0 Ω, V <sub>DD</sub> =50V		12		ns
Rise time	t <sub>r</sub>			9		ns
Turn-off delay time	t <sub>off</sub>			53		ns
Fall time	t <sub>f</sub>			5		ns
Total Gate Charge	Q <sub>G</sub>	I <sub>D</sub> =28A, V <sub>DD</sub> =80V, V <sub>GS</sub> = 10 V		49		nC
Gate to Source Charge	Q <sub>GS</sub>			7		nC
Gate to Drain Charge	Q <sub>GD</sub>			13		nC

■ Marking

Marking	****
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