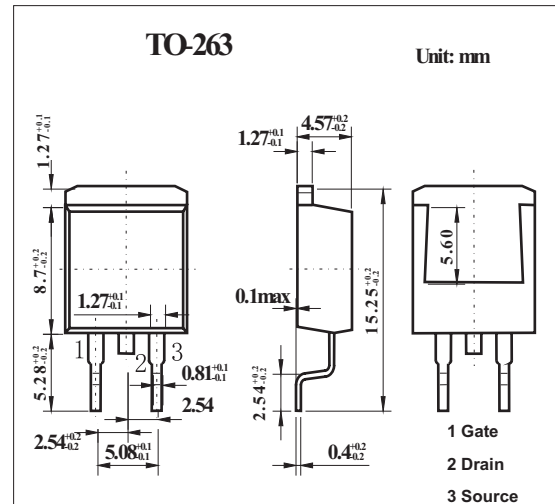


Silicon N-channel Power MOSFET

2SK3628

■ Features

- High-speed switching
- Low ON resistance Ron
- No secondary breakdown
- Avalanche energy capability guaranteed



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain-source surrender voltage	V _{DS}	230	V
Gate-source surrender voltage	V _{GS}	±30	V
Drain current	I _D	20	A
Peak drain current	I _{DP}	80	A
Avalanche energy capability	E _{AS}	570	mJ
Power dissipation Ta = 25°C	P _D	3	W
Power dissipation		100	
Channel temperature	T _{ch}	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

2SK3628

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditions	Min	Typ	Max	Unit
Gate-drain surrender voltage	V _{DSS}	I _D = 1 mA, V _{GS} = 0	230			V
Diode forward voltage	V _{DSF}	I _{DR} = 20 A, V _{GS} = 0			-1.5	V
Gate threshold voltage	V _{th}	V _{DS} = 25 V, I _D = 1 mA	1.7		3.7	V
Drain-source cutoff current	I _{DSS}	V _{DS} = 184 V, V _{GS} = 0			100	μA
Gate-source cutoff currentt	I _{GSS}	V _{GS} = ±30 V, V _{DS} = 0			±1	μA
Drain-source on resistance	R _{DS(on)}	V _{GS} = 10 V, I _D = 10 A		65	85	mΩ
Forward transfer admittance	Y _{fs}	V _{DS} = 25 V, I _D = 10 A	7	14		S
Short-circuit forward transfer capacitance	C _{iss}	V _{DS} = 25 V, V _{GS} = 0, f = 1 MHz		2300		pF
Short-circuit output capacitance	C _{oss}			330		pF
Reverse transfer capacitance	C _{rss}			30		pF
Turn-on delay time	t _{d(on)}	V _{DD} ≈ 100 V, I _D = 15 A R _L = 6.7 Ω, V _{GS} = 10 V		35		ns
Rise time	t _r			26		ns
Turn-off delay time	t _{d(off)}			220		ns
Fall time	t _f			36		ns