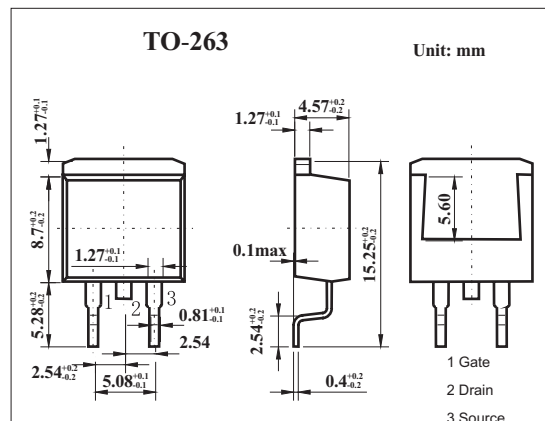
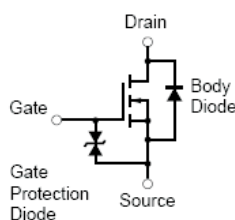


MOS Field Effect Transistor

2SK3112

■ Features

- Gate voltage rating $\pm 30\text{ V}$
- Low on-state resistance
 $R_{DS(on)} = 110\text{m}\Omega\text{ MAX. (}V_{GS} = 10\text{ V, }I_D = 13\text{ A)}$
- Low input capacitance
 $C_{iss} = 1600\text{ pF TYP. (}V_{DS} = 10\text{ V, }V_{GS} = 0\text{ V)}$
- Avalanche capability rated
- Built-in gate protection diode
- Surface mount device available



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Drain to source voltage	V _{DSS}	200	V
Gate to source voltage	V _{GSS}	±30	V
Drain current	I _D	±25	A
	I _{DP} *	±75	A
Power dissipation T _C =25°C T _A =25°C	P _D	100	W
		1.5	
Channel temperature	T _{ch}	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

* $PW \leq 10 \mu s$, Duty Cycle $\leq 1\%$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Drain cut-off current	I _{DSS}	V _{DS} =200V, V _{GS} =0			100	μ A
Gate leakage current	I _{GSS}	V _{GS} = ± 30V, V _{DS} =0			± 10	μ A
Gate to source cut off voltage	V _{GS(off)}	V _{DS} =10V, I _D =1mA	2.5		4.5	V
Forward transfer admittance	Y _{fs}	V _{DS} =10V, I _D =13A	6.0			S
Drain to source on-state resistance	R _{DS(on)}	V _{GS} =10V, I _D =13A		76	110	m Ω
Input capacitance	C _{iss}	V _{DS} =10V, V _{GS} =0, f=1MHZ		1600		pF
Output capacitance	C _{oss}			430		pF
Reverse transfer capacitance	C _{rss}			280		pF
Turn-on delay time	t _{on}	I _D =13A, V _{GS(on)} =10V, V _{DD} =100V, R _G =10 Ω		35		ns
Rise time	t _r			140		ns
Turn-off delay time	t _{off}			110		ns
Fall time	t _f			70		ns