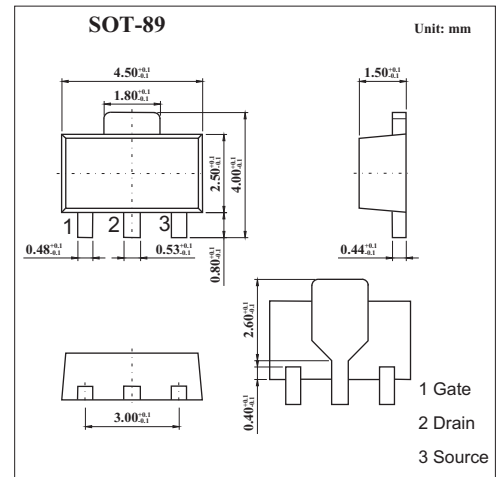


N-Channel Enhancement Mode MOSFET

BSS87

Features

- High-speed switching
- No secondary breakdown.
- Low $R_{DS(on)}$

Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit	
Drain-to-source voltage	V_{DS}	200	V	
Gate-to-source voltage	V_{GS}	± 20	V	
Drain Current	I_D	– Continuous	280	mA
		– Pulsed	1.1	A
Total power dissipation @ $T_A = 25^\circ\text{C}$	P_D	1	W	
Thermal resistance, junction-to-ambient	$R_{\theta JA}$	125	$^\circ\text{C}/\text{W}$	
Operating and storage temperature range	T_J, T_{stg}	-55 to 150	$^\circ\text{C}$	

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

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Drain-to-source breakdown voltage	$V_{(BR)DS}$	$V_{GS} = 0\text{ V}, I_D = 250\ \mu\text{A}$	200			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS} = 200\text{ V}, V_{GS} = 0$			60	μA
Gate-source leakage current	I_{GSS}	$V_{GS} = \pm 20\text{ V}, V_{DS} = 0$			± 0.1	μA
Gate-source threshold voltage	$V_{GS(th)}$	$V_{DS} = V_{GS}, I_D = 1.0\text{ mA}$	0.8		2.8	V
Static drain-to-source on-rResistance	$R_{DS(on)}$	$V_{GS} = 10\text{ V}, I_D = 400\text{ mA}$			6	Ω
Input capacitance	C_{iss}	$V_{DS} = 25\text{ V}, V_{GS} = 0, f = 1\text{ MHz}$			60	pF
Output capacitance	C_{oss}				25	
Transfer capacitance	C_{rss}				10	
Turn-on delay time	$t_{d(on)}$	$V_{DD} = 120\text{ V}, V_{GS} = 10\text{ V}, I_D = 280\text{ mA}, R_{GEN} = 6\ \Omega$			10	ns
Rise time	t_r				12	
Turn-off delay time	$t_{d(off)}$				25	
Fall time	t_f				40	