

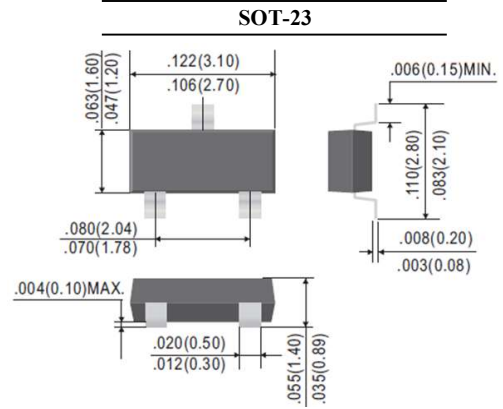
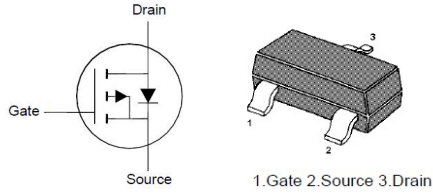


BSS84

P-Channel Enhancement Mode Field Effect Transistor

FEATURES

- Low threshold voltage
- High-speed switching
- Suffix "H" indicates Halogen-free parts, ex. BSS84H



Dimensions in inches and (millimeter)

Maximum Ratings ($T_A=25\text{ }^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V_{DSS}	-50	V
Gate-Source Voltage	V_{GSS}	± 20	V
Maximum Drain Current	I_D	-130	mA
Peak Drain Current	I_{DM}	-520	mA
Total Power Dissipation at $T_A=25\text{ }^\circ\text{C}$ (Note 1)	P_{tot}	250	mW
Thermal Resistance from Junction to Ambient (Note 1)	$R_{\theta JA}$	500	K/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 to +150	$^\circ\text{C}$

Note:

1. Device mounted on a printed-circuit board.

Electrical Characteristics ($T_A=25\text{ }^\circ\text{C}$ unless otherwise specified)

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Drain Source Breakdown Voltage	$I_D = -10\text{ }\mu\text{A}$	$V_{(BR)DSS}$	-50	-	-	V
Gate Threshold Voltage	$V_{DS} = V_{GS}, I_D = -1\text{ mA}$	$V_{GS(th)}$	-0.8	-	-2.0	V
Zero Gate Voltage Drain Current	$V_{DS} = -40\text{ V}$	I_{DSS}	-	-	-100	nA
	$V_{DS} = -50\text{ V}$		-	-	-10	μA
	$V_{DS} = -50\text{ V}, T_j=125\text{ }^\circ\text{C}$		-	-	-60	μA
Gate-Body Leakage Current	$V_{GS} = \pm 20\text{ V}$	I_{GSS}	-	-	± 10	nA
Drain-Source On-State Resistance	$V_{GS} = -10\text{ V}, I_D = -130\text{ mA}$	$R_{DS(ON)}$	-	-	10.0	Ω
Input Capacitance	$V_{DS} = -25\text{ V}, f = 1\text{ MHz}$	C_{iss}	-	-	45	pF
Output Capacitance		C_{oss}	-	-	25	
Reverse Transfer Capacitance		C_{rss}	-	-	12	
Turn-On Time	$V_{GS} = 0\text{ to }-10\text{ V}, V_{DD} = -40\text{ V},$ $I_D = -200\text{ mA}$	$t_{d(on)}$	-	3	-	nS
Turn-Off Time		$t_{d(off)}$	-	7	-	



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RATINGS AND CHARACTERISTIC CURVES

