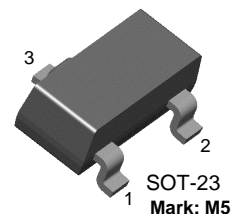


BSR57

N-Channel Low-Frequency Low-Noise Amplifier

- This device is designed for low-power chopper or switching application sourced from process 51



1. Drain 2. Source 3. Gate

Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{DGO}	Drain-Gate Voltage	40	V
V_{GSO}	Gate-Source Voltage	- 40	V
I_{GF}	Forward Gate Current	50	mA
P_{tot}	Total Power Dissipation up to $T_{amb}=40^\circ\text{C}$	250	mW
T_{STG}	Storage Temperature Range	- 55 ~ 150	$^\circ\text{C}$
T_J	Junction Temperature	150	$^\circ\text{C}$

Electrical Characteristics $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Max.	Units
BV_{GSS}	Gate-Source Voltage	$V_{DS} = 0V, I_C = 1.0\mu\text{A}$	40		V
I_{GSS}	Gate Reverse Current	$V_{GS} = 20V, V_{DS} = 0V$		1.0	nA
I_{DSS}	Zero-Gate Voltage Drain Current	$V_{DS} = 15V, V_{GS} = 0V$	20	100	mA
$V_{GS(off)}$	Gate-Source Cut-off Voltage	$V_{DS} = 15V, I_D = 0.5nA$	2.0	6.0	V
$V_{DS(on)}$	Drain-Source On Voltage	$V_{GS} = 0V, I_D = 10mA$		0.5	V
$r_{ds(on)}$	Drain-Source On Reverse	$V_{GS} = 0V, I_D = 0$		40	Ω
C_{rss}	Reverse Transfer Capacitance	$V_{DS} = 0V, V_{GS} = 10V$		5.0	pF
t_d	Delay Time	$V_{DD} = 10V, V_{GS(on)} = 0V$ $I_D = 10mA, V_{GS(off)} = 6.0V$		6.0	ns
t_r	Rise Time			4.0	ns
t_{off}	Turn-off Time			50	ns

Package Dimensions

SOT-23



Dimensions in Millimeters

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