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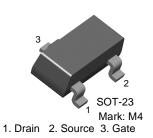
FAIRCHILD

SEMICONDUCTOR®

BSR56

N-Channel Low-Frequency Low-Noise Amplifier

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



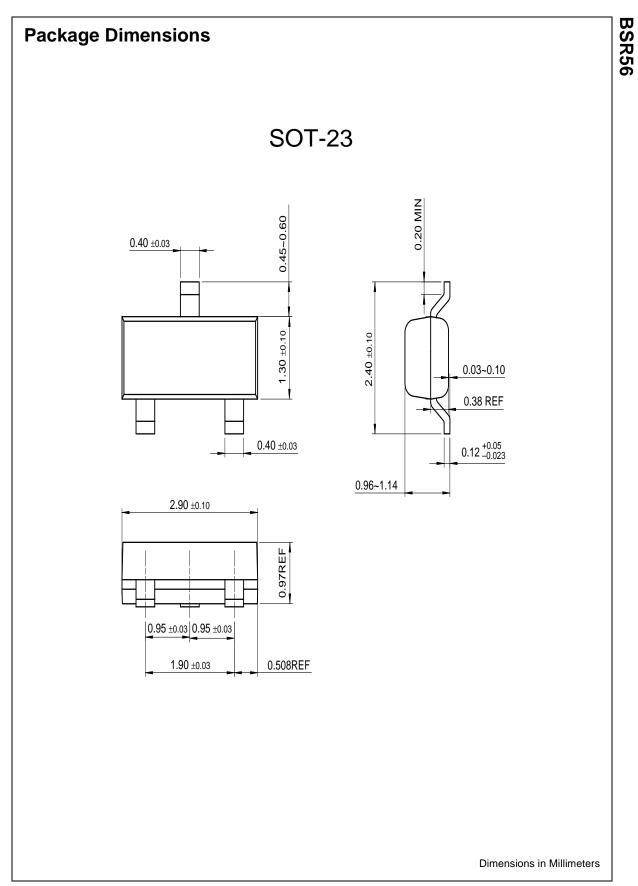
Absolute Maximum Ratings T_C=25°C unless otherwise noted

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 Tamb=40°C	250	mW
T _{STG}	Storage Temperature Range	- 55 ~ 150	°C
TJ	Junction Temperature	150	°C

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV _{GSS}	Gate-Source Voltage	$V_{DS} = 0V, I_C = 1\mu A$	40			V
I _{GSS}	Gate Reverse Current	V _{GS} = 20V			1	nA
I _{DSS}	Zero-Gate Voltage Drain Current	$V_{DS} = 15V, V_{GS} = 0V$	50			mA
V _{GS} (off)	Gate-Source Cut-off Voltage	V _{DS} = 15V, I _D = 0.5nA	4		10	V
V _{DS} (on)	Drain-Source On Voltage	$V_{GS} = 0V, I_{D} = 20mA$			750	mV
r _{ds} (on)	Drain-Source On Reverse	$V_{GS} = 0V, I_{D} = 0$			25	Ω
C _{rss}	Reverse Transfer Capacitance	$V_{DS} = 10V, V_{GS} = 0V$			5	pF
t _d	Delay Time	$V_{DD} = 10V, V_{GS}(on) = 0V$			6	nS
t _r	Rise Time	$I_D = 20$ mA, $V_{GS}(off) = 10V$			3	nS
t _{off}	Turn-off Time				25	nS

BSR56



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Definition of Terms

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