## imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

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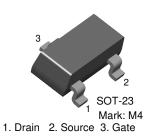
### FAIRCHILD

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#### BSR56

## N-Channel Low-Frequency Low-Noise Amplifier

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



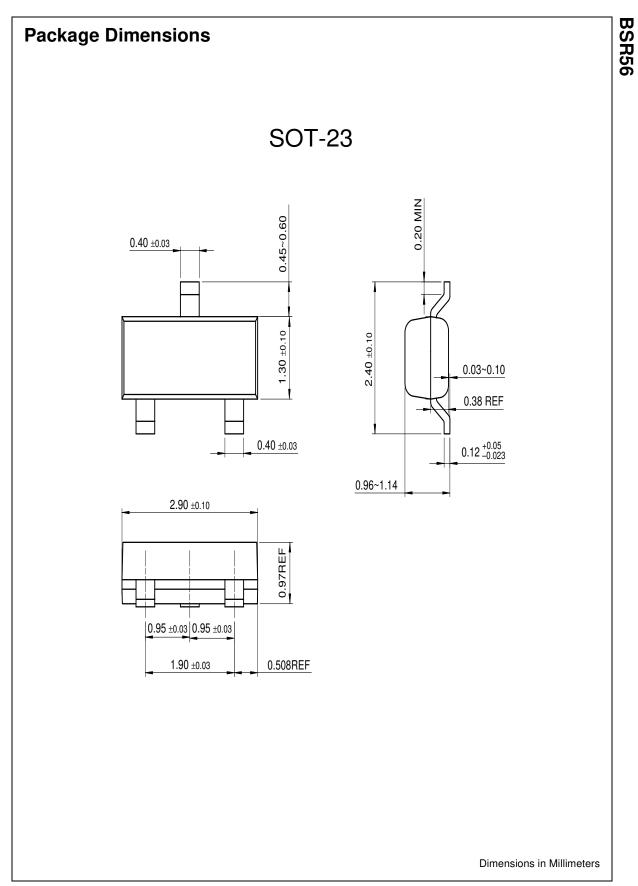
#### Absolute Maximum Ratings T<sub>C</sub>=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>DGO</sub>	Drain-Gate Voltage	40	V
V <sub>GSO</sub>	Gate-Source Voltage	- 40	V
I <sub>GF</sub>	Forward Gate Current	50	mA
P <sub>tot</sub>	Total Power Dissipation up to Tamb=40°C	250	mW
Т <sub>STG</sub>	Storage Temperature Range	- 55 ~ 150	°C
ТJ	Junction Temperature	150	°C

#### Electrical Characteristics T<sub>C</sub>=25°C unless otherwise noted

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

# BSR56



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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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