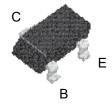
# FSB6726

FSB6726



SuperSOT<sup>™</sup>-3

# PNP General Purpose Amplifier

This device is designed for general purpose medium power amplifiers and switches requiring collector currents to 1.0 A. Sourced from Process 77.

# Absolute Maximum Ratings\* TA = 25°C unless otherwise noted

Symbol	Parameter	FSB660/FSB660A	Units
V <sub>CEO</sub>	Collector-Emitter Voltage	30	V
V <sub>CBO</sub>	Collector-Base Voltage	40	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
Ic	Collector Current - Continuous	1.5	А
T <sub>J,</sub> T <sub>stg</sub>	Operating and Storage Junction Temperature Range	-55 to +150	°C

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

#### NOTES:

1) These ratings are based on a maximum junction temperature of 150°C.

2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

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

Symbol	Characteristic	Мах	Units
		FSB6726	
PD	Total Device Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	250	°C/W

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(continued)

## **Electrical Characteristics**

<b>Electrical Characteristics</b> T <sub>A</sub>		$T_A = 25^{\circ}C$ unless otherwise noted				
Symbol	Parameter		Test Conditions	Min	Max	Units

## OFF CHARACTERISTICS

BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 10 mA	30		V
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = 100 μA	40		V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 100 μA	5		V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 40 V		100	nA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V		100	nA

### **ON CHARACTERISTICS\***

h <sub>FE</sub>		I <sub>C</sub> = 100 mA, V <sub>CE</sub> = 1 V I <sub>C</sub> = 1 A, V <sub>CE</sub> = 1V	60 50	250	-
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 1 A, I <sub>B</sub> = 100 mA		500	mV
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = 1 A, V <sub>CE</sub> = 1 V		1.2	V

## SMALL SIGNAL CHARACTERISTICS

C <sub>cb</sub>	Collector-Base Capacitance	V <sub>CB</sub> = 10 V, f = 1MHz		30	pF
hfe	Small Signal Current Gain	I <sub>C</sub> = 50 mA,V <sub>CE</sub> = 10V, f=20MHz	2.5	25	-

\*Pulse Test: Pulse Width  $\leq 300~\mu\text{s},$  Duty Cycle  $\leq 2.0\%$ 

FSB6726

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Definition of Terms

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