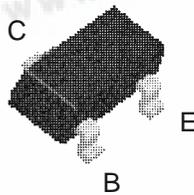


FAIRCHILD
SEMICONDUCTOR™

FSB6726



SuperSOT™-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*

$T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	FSB660/FSB660A	Units
V_{CEO}	Collector-Emitter Voltage	30	V
V_{CBO}	Collector-Base Voltage	40	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current - Continuous	1.5	A
T_J, T_{stg}	Operating and Storage Junction Temperature Range	-55 to +150	$^\circ\text{C}$

*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

$T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Characteristic	Max	Units
		FSB6726	
P_D	Total Device Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	250	$^\circ\text{C}/\text{W}$

PNP General Purpose Amplifier

(continued)

Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
OFF CHARACTERISTICS					
BV_{CEO}	Collector-Emitter Breakdown Voltage	$I_C = 10\text{ mA}$	30		V
BV_{CBO}	Collector-Base Breakdown Voltage	$I_C = 100\ \mu\text{A}$	40		V
BV_{EBO}	Emitter-Base Breakdown Voltage	$I_E = 100\ \mu\text{A}$	5		V
I_{CBO}	Collector Cutoff Current	$V_{CB} = 40\text{ V}$		100	nA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 5\text{V}$		100	nA
ON CHARACTERISTICS*					
h_{FE}	DC Current Gain	$I_C = 100\text{ mA}, V_{CE} = 1\text{ V}$ $I_C = 1\text{ A}, V_{CE} = 1\text{V}$	60 50	250	- -
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 1\text{ A}, I_B = 100\text{ mA}$		500	mV
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = 1\text{ A}, V_{CE} = 1\text{ V}$		1.2	V
SMALL SIGNAL CHARACTERISTICS					
C_{cb}	Collector-Base Capacitance	$V_{CB} = 10\text{ V}, f = 1\text{MHz}$		30	pF
h_{fe}	Small Signal Current Gain	$I_C = 50\text{ mA}, V_{CE} = 10\text{V}, f = 20\text{MHz}$	2.5	25	-

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

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FACT Quiet Series™	Quiet Series™	
FAST®	SuperSOT™-3	
FASTr™	SuperSOT™-6	
GTO™	SuperSOT™-8	
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PRODUCT STATUS DEFINITIONS

Definition of Terms

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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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