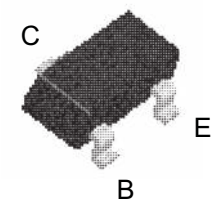
FAIRCHILD
SEMICONDUCTOR TM

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* $T_{A = 25°C \text{ unless otherwise noted}}$

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	°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 $T_{A = 25°C \text{ unless otherwise noted}}$

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

PNP General Purpose Amplifier
(continued)

Electrical Characteristics
$T_{A = 25°C}$ unless otherwise noted

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

*Pulse Test: Pulse Width ≤ 300 μs, Duty Cycle ≤ 2.0%

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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
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