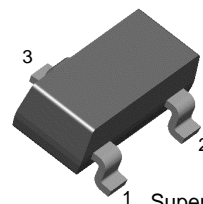


# FSB6726

## PNP General Purpose Amplifier

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



1 SuperSOT™-3  
1. Base 2. Emitter 3. Collector

## Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	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 ~ 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  $150^\circ\text{C}$
2. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations

## Electrical Characteristics $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Conditions	Min.	Max.	Units
<b>Off Characteristics</b>					
$BV_{CEO}$	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
<b>On Characteristics *</b>					
$h_{FE}$	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
<b>Small Signal Characteristics</b>					
$C_{cb}$	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	

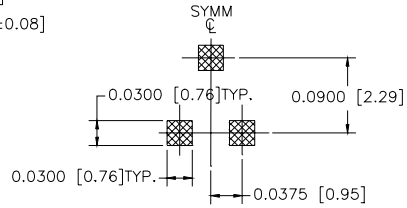
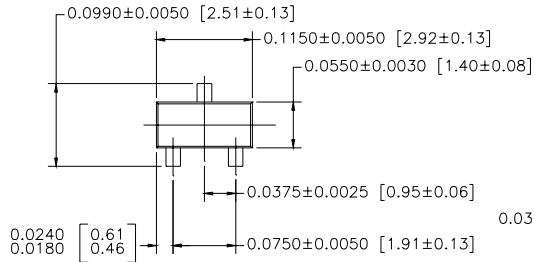
\*Pulse Test: Pulse Width  $\leq 300\mu\text{s}$ , Duty Cycle  $\leq 2.0\%$

## Thermal Characteristics

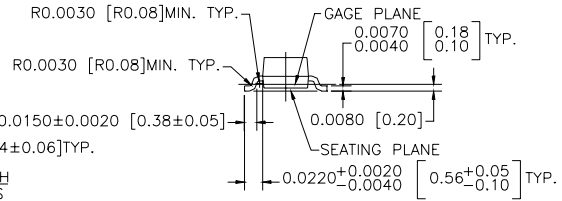
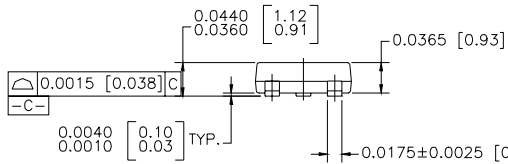
Symbol	Parameter	Max.	Units
$P_D$	Total Device Dissipation	500	$^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	250	$^\circ\text{C}$

Package Dimensions

SuperSOT™-3



LAND PATTERN RECOMMENDATION



CONTROLLING DIMENSION IS INCH  
VALUES IN [ ] ARE MILLIMETERS

- NOTES : UNLESS OTHERWISE SPECIFIED SUPER SOT , 3 LEADS
- STANDARD LEAD FINISH TO BE 150 MICRINCHES / 3.81 MICROMETERS MINIMUM TIN/LEAD (SOLDER) ON COPPER.
  - NO JEDEC REGISTRATION AS OF DEC. 1995.

Dimensions in Millimeters

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ActiveArray <sup>™</sup>	FAST <sup>®</sup>	MICROCOUPLER <sup>™</sup>	PowerTrench <sup>®</sup>	SuperSOT <sup>™</sup> -8
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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.
Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.