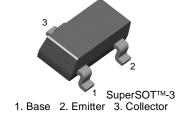


# **FSB6726**

# **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.



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

Symbol	Parameter	Value	Units
$V_{CEO}$	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	Α
T <sub>J</sub> , T <sub>STG</sub>	Operating and Storage Junction Temperature Range	-55 ~ 150	°C

<sup>\*</sup> These rating 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

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

Symbol	Parameter	Test Conditions	Min.	Max.	Units
Off Charac	cteristics		•		
BV <sub>CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 10mA	30		V
BV <sub>CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = 100μA	40		V
BV <sub>EBO</sub>	Emitter-Base Breakdown Voltage	IE = 100μA	5		V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 40V		100	nA
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V		100	nA
On Charac	cteristics *	•	•		
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 100mA, V <sub>CE</sub> = 1V	60		
		$I_C = 1A$ , $V_{CE} = 1V$	50	250	
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 1A, I <sub>B</sub> = 100mA		500	mV
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = 1A, V <sub>CE</sub> = 1V		1.2	V
	nal Characteristics				
C <sub>cb</sub>	Collector-Base Capacitance	VCB = 10V, f = 1MHz		30	pF
h <sub>fe</sub>	Small Signal current Gain	$I_C = 50 \text{mA}, V_{CE} = 10 \text{V}, f = 20 \text{MHz}$	2.5	25	

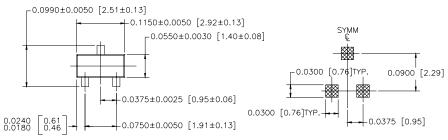
<sup>\*</sup>Pulse Test: Pulse Width ≤ 300µs, Duty Cycle ≤ 2.0%

### **Thermal Characteristics**

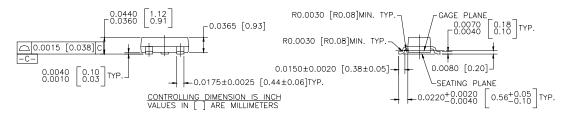
Symbol	Parameter	Max.	Units
P <sub>D</sub>	Total Device Dissipation	500	°C
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	250	°C

# **Package Dimensions**

# SuperSOT™-3



LAND PATTERN RECOMMENDATION



NOTES: UNLESS OTHERWISE SPECIFIED

SUPER SOT , 3 LEADS

- STANDARD LEAD FINISH TO BE 150 MICROINCHES / 3.81 MICROMETERS MINIMUM TIN/LEAD (SOLDER) ON COPPER.
- 2. NO JEDEC REGISTRATION AS OF DEC. 1995.

Dimensions in Millimeters

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	FACT Quiet Series <sup>TM</sup> FAST <sup>®</sup> FASTr <sup>TM</sup> FRFET <sup>TM</sup> GlobalOptoisolator <sup>TM</sup> GTO <sup>TM</sup> HiSeC <sup>TM</sup> ImpliedDisconnect <sup>TM</sup> ISOPLANAR <sup>TM</sup> Around the world. <sup>TM</sup>	LittleFETTM MICROCOUPLERTM MicroFETTM MicroPakTM MICROWIRETM MSXTM MSXProTM OCXTM OCXPROTM OPTOLOGIC® OPTOPLANARTM PACMANTM	Power247 <sup>TM</sup> PowerTrench <sup>®</sup> QFET <sup>®</sup> QS <sup>TM</sup> QT Optoelectronics <sup>TM</sup> Quiet Series <sup>TM</sup> RapidConfigure <sup>TM</sup> RapidConnect <sup>TM</sup> SILENT SWITCHER <sup>®</sup> SMART START <sup>TM</sup> SPM <sup>TM</sup> Stealth <sup>TM</sup>	SuperSOT <sup>TM</sup> -6 SuperSOT <sup>TM</sup> -8 SyncFET <sup>TM</sup> TinyLogic <sup>®</sup> TINYOPTO <sup>TM</sup> TruTranslation <sup>TM</sup> UHC <sup>TM</sup> UltraFET <sup>®</sup> VCX <sup>TM</sup>
The Power Franch Programmable Ac	nise™		<b>.</b>	
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### 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.

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