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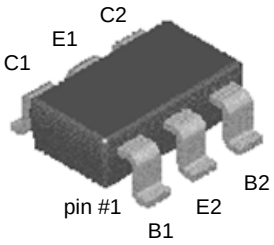
September 2007

FMB857B
PNP Epitaxial Silicon Transistor

- This device is designed for general purpose amplifier application at collector currents to 300mA.
- Sourced from process 68.



SSOT-6
Mark: .N2
Dot denotes pin #1

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	45	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current (DC)	500	mA
T_J, T_{STG}	Operating and Storage Junction Temperature Range	-55 ~ 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 degrees C.
2. These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.
3. All voltages (V) and currents (A) are negative polarity for PNP transistors.

Thermal Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Max.	Units
P_D	Total Device Dissipation Derate above 25°C	700 5.6	mW mW/°C
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	180	°C/W

*Device mounted on FR-4 PCB 1.6" X 1.6" X 0.06".

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
BV_{CBO}	Collector-Base Breakdown Voltage	I_C = 10μA	50			V
BV_{CEO}	Collector-Emitter Breakdown Voltage	I_C = 1mA	45			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = 10μA	5			V
BV_{CEX}	Collector-Emitter Cutoff Voltage	I_C = 10μA, V_{BE} = 1V	50			nA
I_{CBO}	Collector Cut-off Current	V_{CB} = 30V, T = 25°C T =150°C			15 4000	nA
h_{FE}	DC Current Gain	V_{CE} = 5V, I_C = 2mA	220		475	
V_{CE}(sat)	Collector-Emitter Saturation Voltage	I_C = 10 mA, I_B = 0.5 mA I_C = 100 mA, I_B = 5 mA			0.3 0.65	V
V_{BE}(on)	Base-Emitter On Voltage	V_{CE} = 5V, I_C = 2mA V_{CE} = 5V, I_C = 10mA	0.6		0.75 0.82	V

NOTES: All voltages (V) and currents (A) are negative polarity for PNP transistors.

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Rev. I30