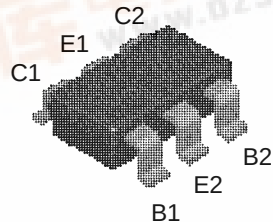


FAIRCHILD
SEMICONDUCTOR™

*Discrete Power
&
Signal Technologies*

FMBA0656



Package: SuperSOT-6

Device Marking: .003

Note: The " . " (dot) signifies Pin 1

Transistor 1 is NPN device,
transistor 2 is PNP device.

NPN & PNP Complementary Dual Transistor SuperSOT- 6 Surface Mount Package

This device was designed for general purpose amplifier applications at collector currents to 300mA. Sourced from Process 33 (NPN) and Process 73 (PNP).

Absolute Maximum Ratings

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

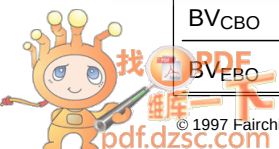
Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage	80	V
V_{CBO}	Collector-Base Voltage	80	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Collector Current (continuous)	500	mA
P_D	Power Dissipation @ $T_A = 25^\circ\text{C}^*$	0.7	W
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_J	Junction Temperature	150	$^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	180	$^\circ\text{C/W}$

* P_D total, for both transistors. For each transistor, $P_D = 350\text{mW}$.

Electrical Characteristics

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

Symbol	Parameter	Test Conditions	Min	Max	Units
BV_{CEO}	Collector to Emitter Voltage	$I_C = 1.0\text{ mA}$	80		V
BV_{CBO}	Collector to Base Voltage	$I_C = 100\text{ uA}$	80		V
BV_{EBO}	Emitter to Base Voltage	$I_E = 100\text{ uA}$	4		V



NPN & PNP Complementary Dual Transistor

(continued)

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

Symbol	Parameter	Test Conditions	Min	Max	Units
I_{CBO}	Collector Cutoff Current	$V_{cb} = 80\text{ V}$		100	nA
I_{CEO}	Collector Cutoff Current	$V_{ce} = 60\text{ V}$		100	nA
h_{FE}	DC Current Gain	$V_{ce} = 1\text{ V}, I_c = 10\text{ mA}$ $V_{ce} = 1\text{ V}, I_c = 100\text{ mA}$	100 100		-
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_c = 100\text{ mA}, I_b = 10\text{ mA}$		0.25	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_c = 100\text{ mA}, V_{ce} = 1\text{ V}$		1.2	V

Small - Signal Characteristics

f_T	Current Gain - Bandwidth Product	$V_{ce} = 1\text{ V}, I_c = 100\text{ mA}, f = 100\text{ MHz}$	50		-
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