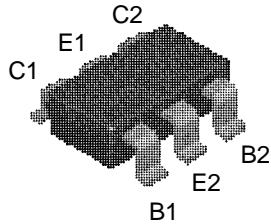


**FMBA0656**



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	$^\circ\text{C}/\text{W}$

\* $P_d$  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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