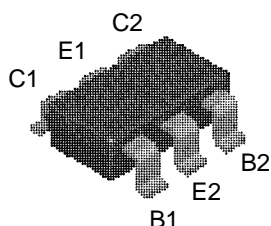


**FMB2227A**



Package: SuperSOT-6

Device Marking: .001

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 complementary dual device was designed for use as a medium power amplifier and switch requiring collector currents up to 300mA. Sourced from Pr19 (NPN) and Pr63 (PNP).

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

Symbol	Parameter	Value	Units
V <sub>CEO</sub>	Collector-Emitter Voltage	30	V
V <sub>CBO</sub>	Collector-Base Voltage	60	V
V <sub>EBO</sub>	Emitter-Base Voltage	5	V
I <sub>C</sub>	Collector Current	500	mA
P <sub>D</sub>	Power Dissipation @T <sub>a</sub> = 25°C*	0.7	W
T <sub>STG</sub>	Storage Temperature Range	-55 to +150	°C
T <sub>J</sub>	Junction Temperature	150	°C
R <sub>θJA</sub>	Thermal Resistance, Junction to Ambient	180	°C/W

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

Symbol	Parameter	Test Conditions	Min	Max	Units
BV <sub>CEO</sub>	Collector to Emitter Voltage	I <sub>c</sub> = 10 mA	30		V
BV <sub>CBO</sub>	Collector to Base Voltage	I <sub>c</sub> = 10 uA	60		V
BV <sub>EBO</sub>	Emitter to Base Voltage	I <sub>e</sub> = 10 uA	5		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	$V_{cb} = 50V$		30	nA
$I_{EBO}$	Emitter Cutoff Current	$V_{eb} = 3.0V$		30	nA
$h_{FE}$	DC Current Gain	$V_{ce} = 10V, I_c = 1.0mA$ $V_{ce} = 10V, I_c = 10mA$ $V_{ce} = 10V, I_c = 150mA$ $V_{ce} = 10V, I_c = 300mA$	50 75 100 30		-
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_c = 150mA, I_b = 15mA$ $I_c = 300mA, I_b = 30mA$		0.4 1.4	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_c = 150mA, I_b = 15mA$		1.3	V
<b>Small - Signal Characteristics</b>			<b>Typical</b>		
$C_{OB}$	Output Capacitance	$V_{cb} = 10V, f = 1.0MHz$		6	pF
$C_{IB}$	Input Capacitance	$V_{eb} = 0.5V, f = 100kHz$		20	pF
$f_T$	Current Gain - Bandwidth Product	$V_{ce} = 20V, I_c = 50mA, f = 100MHz$		250	MHz