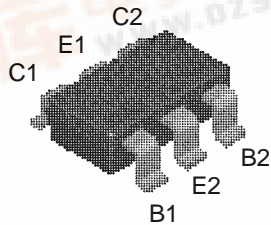




Discrete Power
&
Signal Technologies

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

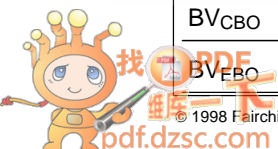
T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _{CEO}	Collector-Emitter Voltage	30	V
V _{CBO}	Collector-Base Voltage	60	V
V _{EBO}	Emitter-Base Voltage	5	V
I _c	Collector Current	500	mA
P _D	Power Dissipation @T _a = 25°C*	0.7	W
T _{STG}	Storage Temperature Range	-55 to +150	°C
T _J	Junction Temperature	150	°C
R _{θJA}	Thermal Resistance, Junction to Ambient	180	°C/W

Electrical Characteristics

T_A = 25°C unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
BV _{CEO}	Collector to Emitter Voltage	I _c = 10 mA	30		V
BV _{CBO}	Collector to Base Voltage	I _c = 10 uA	60		V
BV _{EBO}	Emitter to Base Voltage	I _e = 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

Small - Signal Characteristics**Typical**

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