

2SB560



2006A

PNP/NPN Epitaxial Planar
Silicon Transistors**2SD438**

Low Frequency Power Amp Applications

©326G

The 2SB560/2SD438 are epitaxial planar transistors for complementary push-pair having high reverse voltage and low saturation voltage, and suitable universal AF power amplifier use.

():2SB560

Absolute Maximum Ratings at $T_a=25^{\circ}\text{C}$

			unit
Collector to Base Voltage	V_{CB0}	(-)100	V
Collector to Emitter Voltage	V_{CE0}	(-)80	V
Emitter to Base Voltage	V_{EB0}	(-)5	V
Collector Current	I_C	(-)0.7	A
Peak Collector Current	i_{cp}	(-)1.0	A
Collector Dissipation	P_C	900	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics at $T_a=25^{\circ}\text{C}$

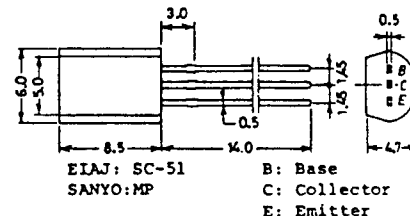
			min	typ	max
Collector Cutoff Current	I_{CB0}	$V_{CB}=(-)20\text{V}, I_E=0$			(-)1.0
Emitter Cutoff Current	I_{EB0}	$V_{EB}=(-)4\text{V}, I_C=0$			(-)1.0
DC Current Gain	$h_{FE}(1)$	$V_{CE}=(-)5\text{V}, I_C=(-)50\text{mA}$	60*		560*
	$h_{FE}(2)$	$V_{CE}=(-)5\text{V}, I_C=(-)0.5\text{A}$	30		
Gain Bandwidth Product	f_T	$V_{CE}=(-)10\text{V}, I_C=(-)50\text{mA}$		100	
Output Capacitance	c_{ob}	$V_{CE}=(-)10\text{V}, f=1\text{MHz}$		(15)	
				10	
C-B Breakdown Voltage	$V_{(BR)CBO}$	$I_C=10\mu\text{A}$	(-)100		
C-E Breakdown Voltage	$V_{(BR)CEO}$	$I_C=1\text{mA}, R_{BE}=\infty$	(-)80		
E-B Breakdown Voltage	$V_{(BR)EBO}$	$I_C=(-)10\mu\text{A}, I_E=0$	(-)5		
C-E Saturation Voltage	$V_{CE(sat)}$	$I_C=(-)500\text{mA}, I_B=(-)50\text{mA}$	(-0.3)	(-0.8)	
			0.2	0.6	
B-E Saturation Voltage	$V_{BE(sat)}$	$I_C=(-)500\text{mA}, I_B=(-)50\text{mA}$	(-)0.85	(-)1.2	

* The 2SB560/2SD438 are classified by 50mA h_{FE} as follows.

60	D	120	100	E	200	160	F	320	280	G	560
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Case Outline 2006A

(unit:mm)



For details, refer to the description of the 2SD438.