查询2SB1418供应商 捷多邦，专业PCB打样工厂，24小时加急出货

2SB1418, 2SB1418A

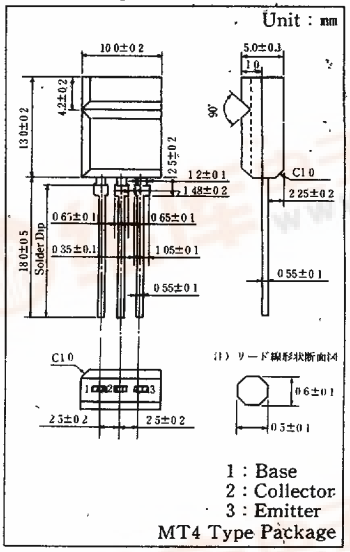
Silicon PNP Epitaxial Planar Darlington Type

Power Amplifier
Complementary Pair with 2SD2138

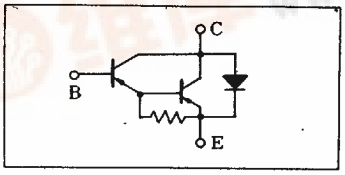
■ Features

- High DC current gain (h_{FE})
- High speed switching
- Automatic mounting by radial taping is possible.

■ Package Dimensions



■ Inner Circuit



■ Absolute Maximum Ratings (Tc=25°C)

Item		Symbol	Value	Unit
Collector-base voltage	2SB1418	V_{CBO}	−60	V
	2SB1418A		−80	
Collector-emitter voltage	2SB1418	V_{CEO}	−60	V
	2SB1418A		−80	
Emitter-base voltage		V_{EBO}	−5	V
Peak collector current		I_{CP}	−4	A
Collector current		I_C	−2	A
Collector power dissipation	T_C=25°C	P_C	15	W
	Ta=25°C		2.0	
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	−55～+150	°C

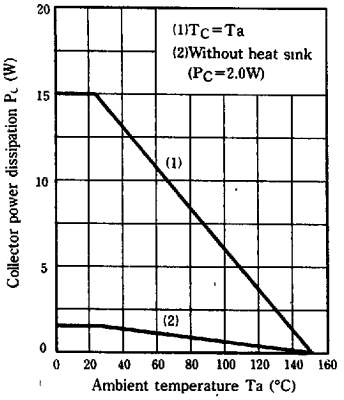
■ Electrical Characteristics (Tc=25°C)

Item		Symbol	Condition	min.	typ.	max.	Unit
Collector cutoff current	2SB1418	I_{CBO}	V_{CB}=−60V, I_B=0			−100	μA
	2SB1418A		V_{CB}=−80V, I_B=0			−100	
Collector cutoff current	2SB1418	I_{CEO}	V_{CE}=−30V, V_{BE}=0			−100	μA
	2SB1418A		V_{CE}=−40V, V_{BE}=0			−100	
Emitter cutoff current		I_{EBO}	V_{EB}=−5V, I_C=0			−100	μA
Collector-emitter voltage	2SB1418	V_{CEO}	I_C=−30mA, I_B=0	−60			V
	2SB1418A			−80			
DC current gain		h_{FE1}	V_{CE}=−4V, I_C=−1A	1000			
		h_{FE2}*	V_{CE}=−4V, I_C=−2A	1000		10000	
Base-emitter voltage		V_{BE}	V_{CE}=−4V, I_C=−2A			−2.8	V
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_C=−2A, I_B=−8mA			−2.5	V
Transition frequency		f_T	V_{CE}=−10V, I_C=−0.5A, f=1MHz		20		MHz
Turn-on time		t_{on}	I_C=−2A, I_{B1}=−8mA, I_{B2}=8mA		0.2		μs
Turn-off time		t_{off}	V_{CC}=−50V		2		μs

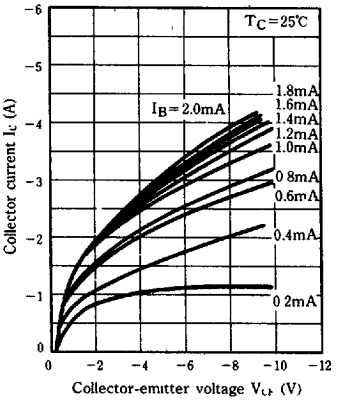
*h_{FE2} Classifications

Class	R	Q	P
h_{FE2}	1000～2500	2000～5000	4000～10000

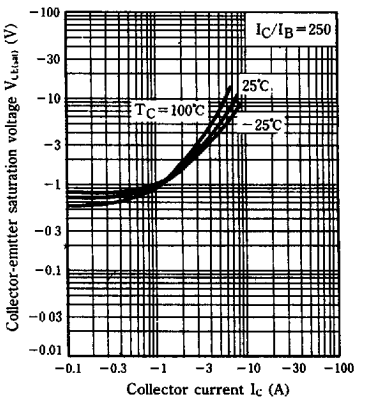
$P_C - T_a$



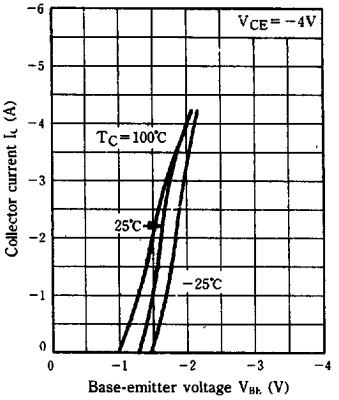
$I_C - V_{CE}$



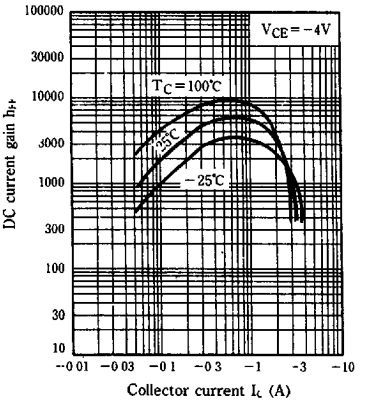
$V_{CE(sat)} - I_C$



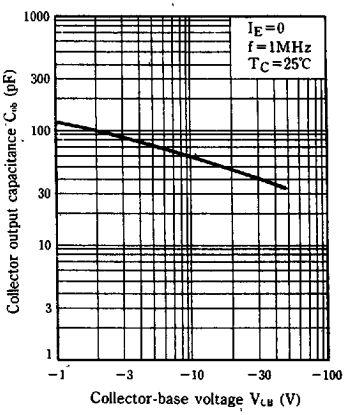
$I_C - V_{BE}$



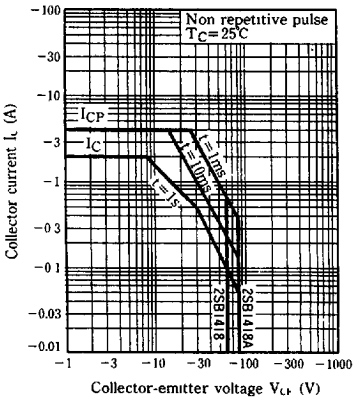
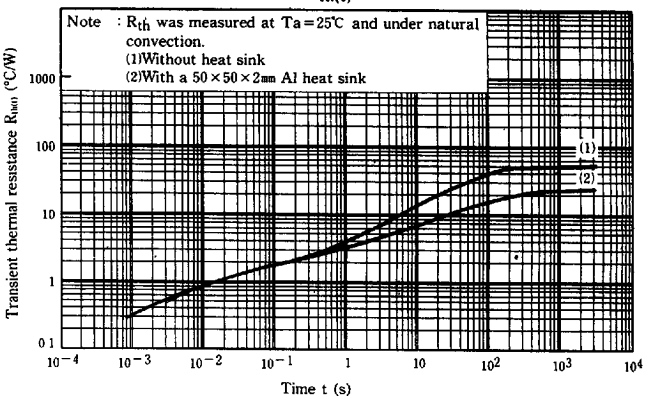
$h_{FE} - I_C$



$C_{ob} - V_{CB}$



Safety operation area-forward bias (ASO)



$R_{th(t)} - t$