

NPN General Purpose Transistor

SST6838

●Features

- 1) BV_{CBO} minimum is 40V (I_C=1mA)
- 2) Complements the SST6839.

●Package, marking, and packaging specifications

Part No.	SST6838
Packaging type	SST3
Marking	RBR
Code	T116
Basic ordering unit (pieces)	3000

●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-base voltage	V _{CBO}	50	V
Collector-emitter voltage	V _{CEO}	40	V
Emitter-base voltage	V _{EB0}	5	V
Collector current	I _C	0.2	A
Collector power dissipation	P _C	0.2	W
Junction temperature	T _J	150	°C
Storage temperature	T _{Stg}	-55~+150	°C

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Collector-base breakdown voltage	BV _{CBO}	50	—	—	V	I _C =10 μA (Ta=-40°C~+125°C)
Collector-emitter breakdown voltage	BV _{CEO}	40	—	—	V	I _C =1mA (Ta=-40°C~+125°C)
Collector cutoff current	I _{CBO}	—	—	0.5	μA	V _{CA} =30V (Ta=85°C)
		—	—	5	μA	V _{CS} =30V (Ta=125°C)
Emitter cutoff current	I _{EB0}	—	—	0.5	μA	V _{EB} =4V (Ta=85°C)
		—	—	5	μA	V _{EB} =4V (Ta=125°C)
Collector-emitter saturation voltage	V _{CE(sat)}	—	—	0.4	V	I _C /I _B =50mA/5mA (Ta=25°C)
		—	—	0.5	V	I _C /I _B =10mA/0.2mA (Ta=85°C)
		—	—	0.7	V	I _C /I _B =10mA/0.2mA (Ta=125°C)
DC current transfer ratio	h _{FE1}	200	—	—	—	V _{CE} /I _C =5V/1mA (Ta=-40°C~+25°C)
		—	—	800	—	V _{CE} /I _C =5V/1mA (Ta=85°C)
		—	—	1000	—	V _{CE} /I _C =5V/1mA (Ta=125°C)
DC current transfer ratio	h _{FE2}	150	—	—	—	V _{CE} /I _C =10V/5mA (Ta=-40°C~+25°C)
Transition frequency	f _T	50	180	—	MHz	V _{CE} =12V, I _C =2mA, f=100MHz (Ta=25°C)
Collector output capacitance	C _{OB}	—	2	3.5	pF	V _{CE} =12V, f=1MHz (Ta=25°C)
Emitter input capacitance	C _{EB}	—	17	—	pF	V _{EB} =0.5V, f=1MHz (Ta=25°C)

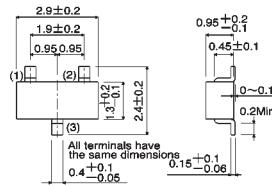
●Electrical characteristic curves

The electrical characteristic curves for these products are the same as those of UMT222A, SST222A, MMST2222A, and PN2222A.

Refer to pages 621 and 623.

●External dimensions (Units : mm)

SST6838



ROHM : SST3

(1) Emitter
(2) Base
(3) Collector