

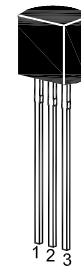
# 2SD468

## NPN Silicon Epitaxial Planar Transistor

Low Frequency Power amplifier applications.

The transistor is subdivided into two groups B and C according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.



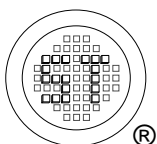
1. Emitter 2. Collector 3. Base  
TO-92 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	25	V
Collector Emitter Voltage	$V_{CEO}$	20	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	1	A
Peak Collector Current	$I_{CM}$	1.5	A
Power Dissipation	$P_{tot}$	0.9	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 55 to + 150	$^\circ\text{C}$

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

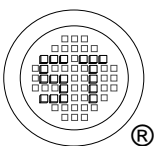
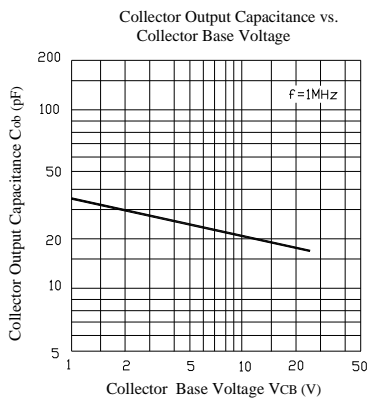
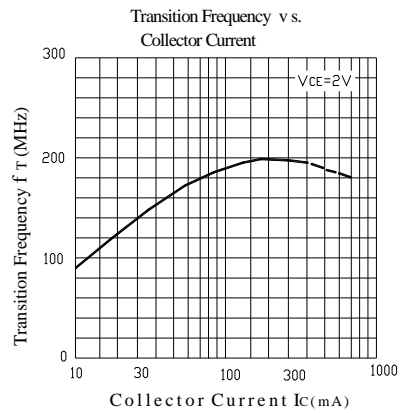
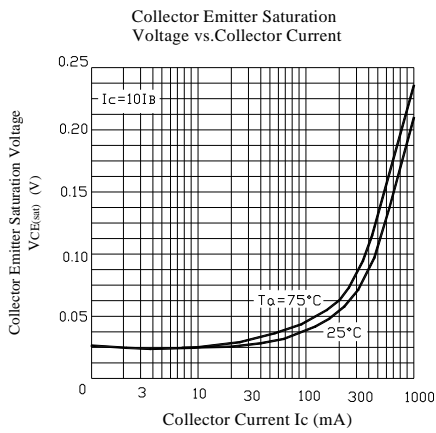
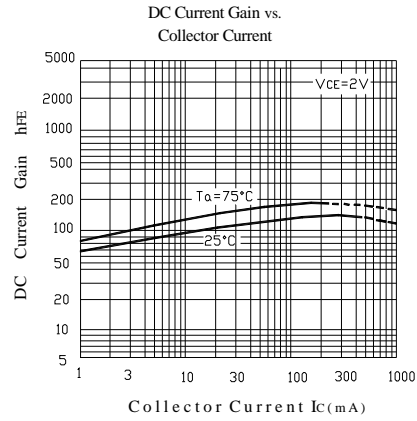
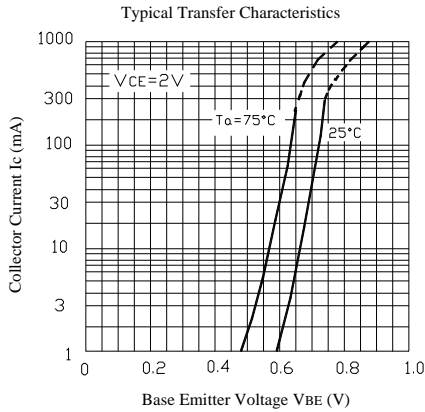
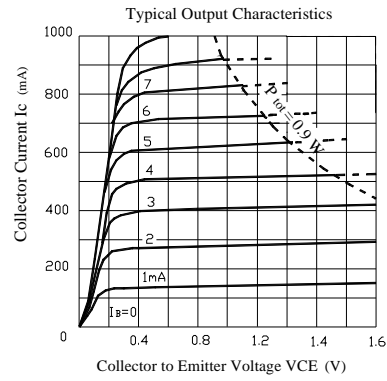
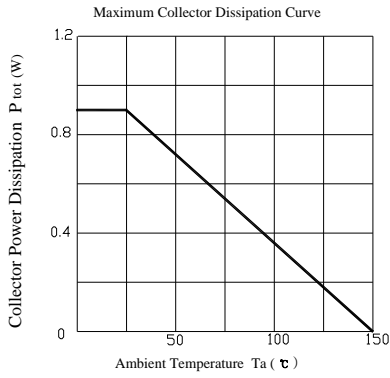
Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE} = 2\text{ V}$ , $I_C = 0.5\text{ A}$	Current Gain Group B	$h_{FE}$	85	-	170	-
	Current Gain Group C	$h_{FE}$	120	-	240	-
Collector Base Cutoff Current at $V_{CB} = 20\text{ V}$	$I_{CBO}$	-	-	1	$\mu\text{A}$	
Collector Base Breakdown Voltage at $I_C = 10\text{ }\mu\text{A}$	$V_{(BR)CBO}$	25	-	-	V	
Collector Emitter Breakdown Voltage at $I_C = 1\text{ mA}$	$V_{(BR)CEO}$	20	-	-	V	
Emitter Base Breakdown Voltage at $I_E = 10\text{ }\mu\text{A}$	$V_{(BR)EBO}$	5	-	-	V	
Collector Emitter Saturation Voltage at $I_C = 0.8\text{ A}$ , $I_B = 0.08\text{ A}$	$V_{CE(sat)}$	-	0.2	0.5	V	
Base Emitter Voltage at $V_{CE} = 2\text{ V}$ , $I_C = 0.5\text{ A}$	$V_{BE}$	-	0.79	1	V	
Collector Output Capacitance at $V_{CB} = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_{ob}$	-	22	-	pF	
Transition Frequency at $V_{CE} = 2\text{ V}$ , $I_C = 0.5\text{ A}$	$f_T$	-	190	-	MHz	



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