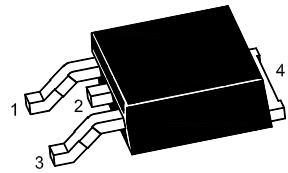


2SB1204R

PNP Silicon Epitaxial Planar Transistor

for power switching and amplifier applications



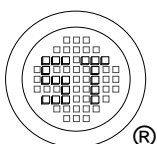
1. Base 2. Collector 3. Emitter 4. Collector
TO-252 Plastic Package

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

Parameter	Symbol	Value	Unit
Collector Base Voltage	$-V_{CBO}$	60	V
Collector Emitter Voltage	$-V_{CEO}$	50	V
Emitter Base Voltage	$-V_{EBO}$	6	V
Collector Current	$-I_C$	8	A
Collector Current	$-I_{CP}$	12	A
Power Dissipation	P_{tot}	1	W
Power Dissipation($T_c = 25^\circ\text{C}$)	P_{tot}	20	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $-V_{CE} = 2\text{ V}$, $-I_C = 0.5\text{ A}$ at $-V_{CE} = 2\text{ V}$, $-I_C = 6\text{ A}$	Current Gain Group Q R S T	h_{FE}	70	-	140	-
		h_{FE}	100	-	200	-
		h_{FE}	140	-	280	-
		h_{FE}	200	-	400	-
		h_{FE}	35	-	-	-
Collector Base Cutoff Current at $-V_{CB} = 40\text{ V}$	$-I_{CBO}$	-	-	1	μA	
Emitter Base Cutoff Current at $-V_{EB} = 4\text{ V}$	$-I_{EBO}$	-	-	1	μA	
Collector Base Breakdown Voltage at $-I_C = 10\ \mu\text{A}$	$-V_{(BR)CBO}$	60	-	-	V	
Collector Emitter Breakdown Voltage at $-I_C = 1\text{ mA}$	$-V_{(BR)CEO}$	50	-	-	V	
Emitter Base Breakdown Voltage at $-I_E = 10\ \mu\text{A}$	$-V_{(BR)EBO}$	6	-	-	V	
Collector Emitter Saturation Voltage at $-I_C = 4\text{ A}$, $-I_B = 0.2\text{ A}$	$-V_{CE(sat)}$	-	-	0.5	V	
Base Emitter Saturation Voltage at $-I_C = 4\text{ A}$, $-I_B = 0.2\text{ A}$	$-V_{BE(sat)}$	-	-	1.3	V	
Transition Frequency at $-V_{CE} = 5\text{ V}$, $-I_C = 1\text{ A}$	f_T	-	130	-	MHz	
Output Capacitance at $-V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	95	-	pF	



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ISO 9001:2008
Certificate No. 16073000

ISO 14001:2004
Certificate No. 7116

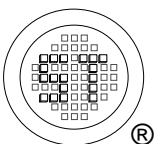
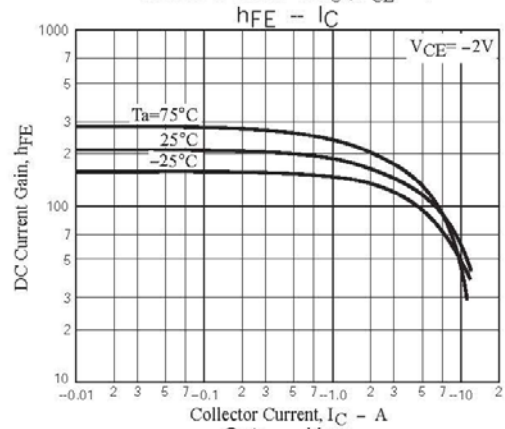
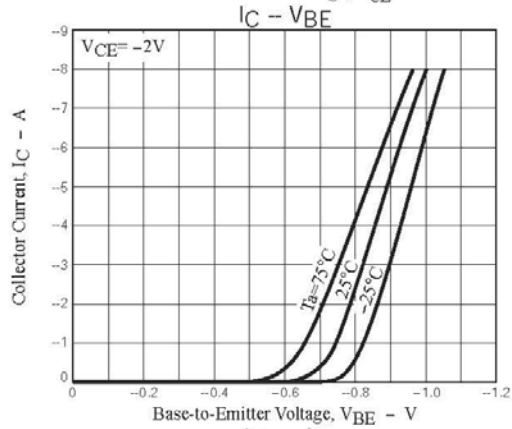
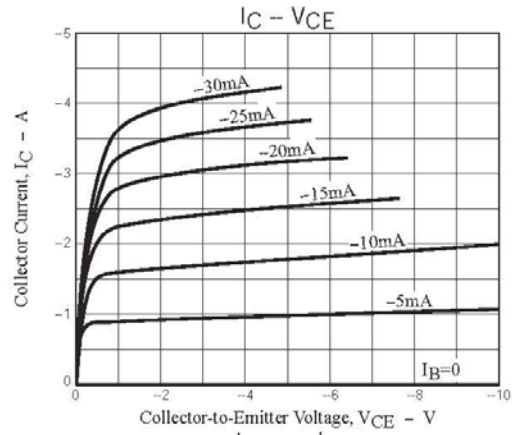
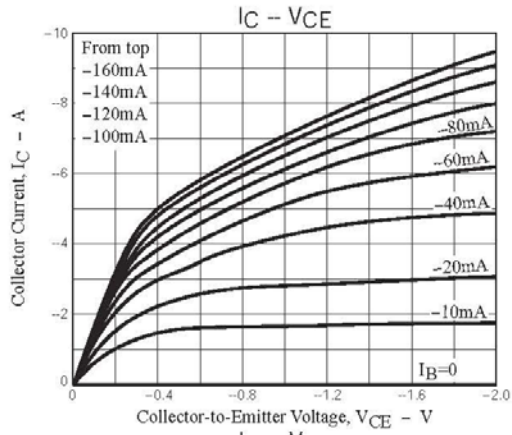
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IECQ QC 080000
Certificate No. PSC-18P4-1483

Dated : 03/03/2016 Rev: 01

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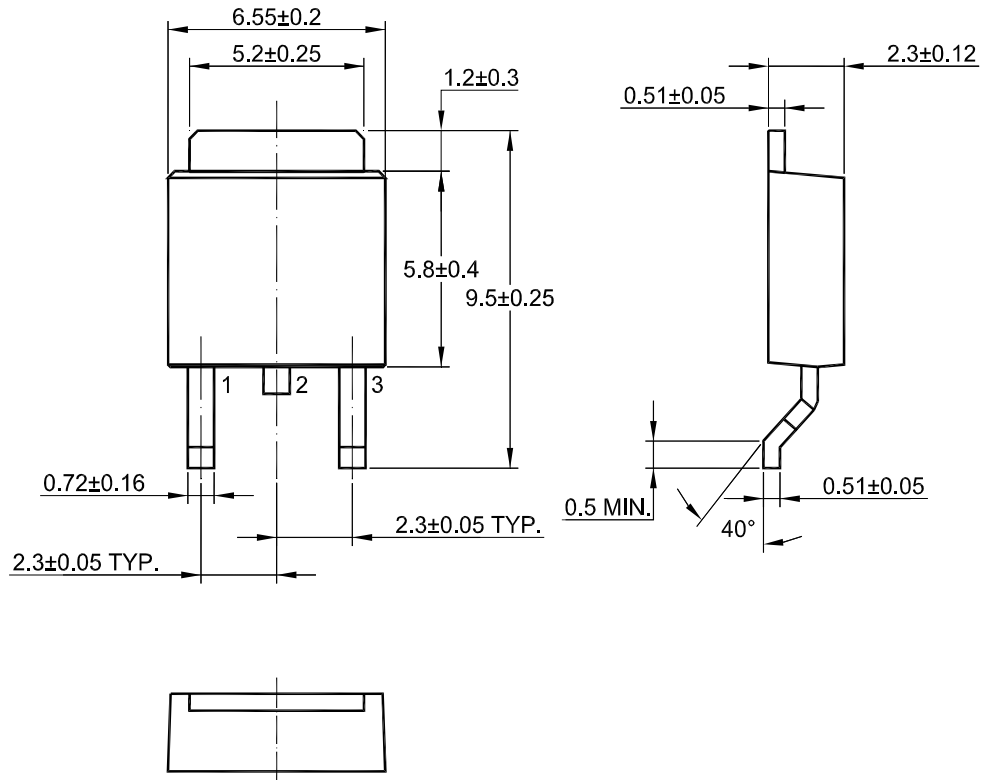


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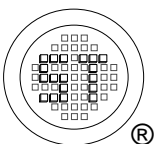


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TO-252 PACKAGE OUTLINE



Dimensions in mm



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