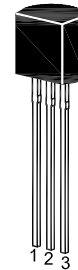


2SC1383 / 2SC1384

NPN Silicon Epitaxial Planar Transistor

For low-frequency power amplification and driver Amplification. Complementary to 2SA683 to and 2SA684.



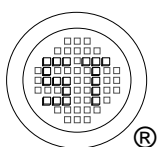
1. Emitter 2. Collector 3. Base
TO-92 Plastic Package

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

Parameter	Symbol	Value	Unit	
Collector Base Voltage	V_{CBO}	2SC1383 2SC1384	30 60	V
Collector Emitter Voltage		V_{CEO}	2SC1383 2SC1384	25 50
Emitter Base Voltage	V_{EBO}		5	V
Collector Current	I_C	1	A	
Peak Collector Current	I_{CP}	1.5	A	
Power Dissipation	P_{tot}	1	W	
Junction Temperature	T_j	150	$^\circ\text{C}$	
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$	

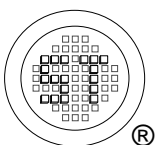
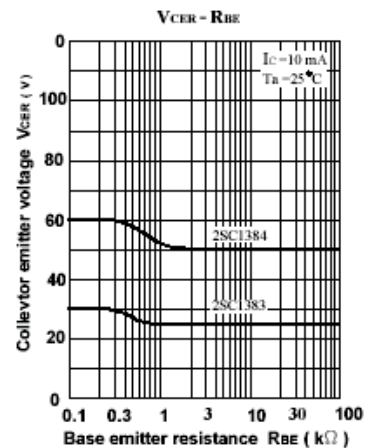
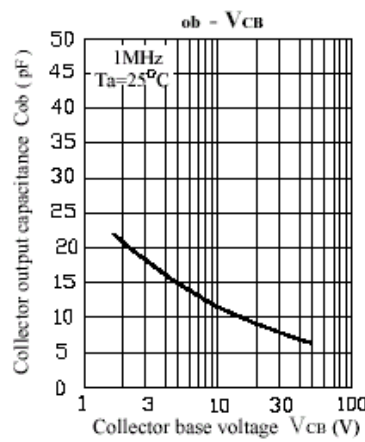
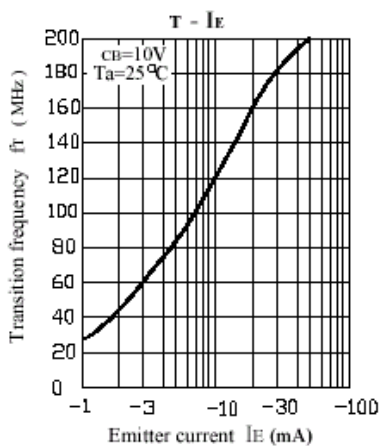
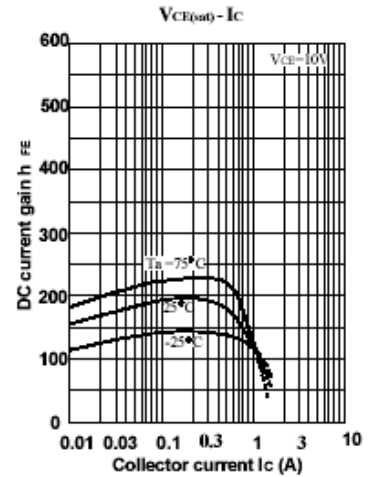
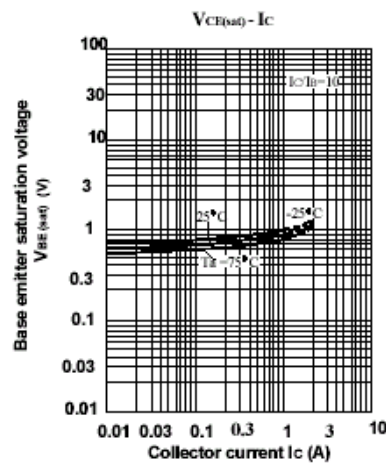
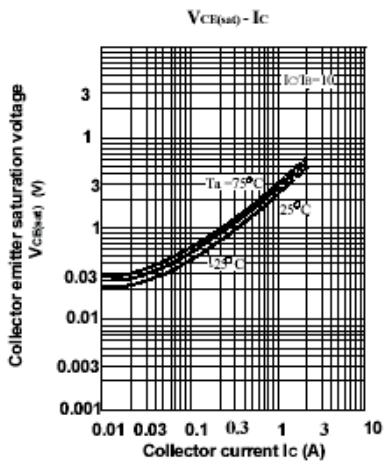
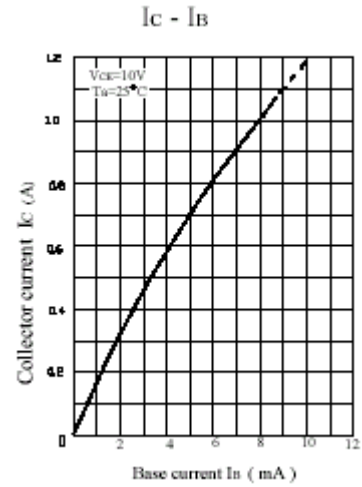
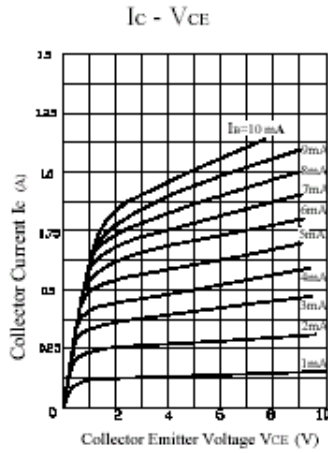
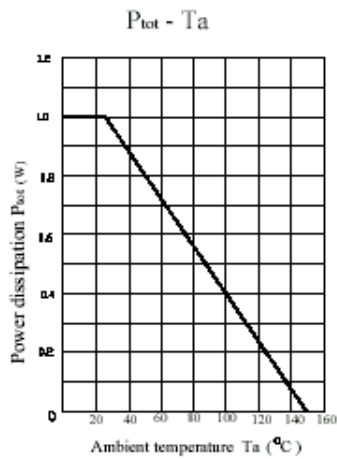
Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit	
DC Current Gain at $V_{CE} = 10\text{ V}$, $I_C = 500\text{ mA}$ at $V_{CE} = 5\text{ V}$, $I_C = 1\text{ A}$	Current Gain Group Q R S	h_{FE}	85	-	170	-
		h_{FE}	120	-	240	-
		h_{FE}	170	-	340	-
		h_{FE}	50	-	-	-
Collector Base Cutoff Current at $V_{CB} = 20\text{ V}$	I_{CBO}	-	-	0.1	μA	
Collector Base Breakdown Voltage at $I_C = 10\text{ }\mu\text{A}$	$V_{(BR)CBO}$	2SC1383 2SC1384	30 60	- -	- -	V
Collector Emitter Breakdown Voltage at $I_C = 2\text{ mA}$		$V_{(BR)CEO}$	2SC1383 2SC1384	25 50	- -	- -
Emitter Base Breakdown Voltage at $I_E = 10\text{ }\mu\text{A}$	$V_{(BR)EBO}$		5	-	-	V
Collector Emitter Saturation Voltage at $I_C = 500\text{ mA}$, $I_B = 50\text{ mA}$	$V_{CE(sat)}$	-	-	0.4	V	
Base Emitter Saturation Voltage at $I_C = 500\text{ mA}$, $I_B = 50\text{ mA}$	$V_{BE(sat)}$	-	-	1.2	V	
Gain Bandwidth Product at $V_{CE} = 10\text{ V}$, $-I_E = 50\text{ mA}$, $f = 200\text{ MHz}$	f_T	-	200	-	MHz	
Output Capacitance at $V_{CB} = 10\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	-	20	pF	



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ISO 9001 : 2008 Certificate No. 071340
 ISO 14001 : 2004 Certificate No. 07116
 BS OHSAS 18001 : 2007 Certificate No. 7116
 IECQ QC 080000 Certificate No. 79C1894-1884