

<b>SANYO</b>	No.1049D	<b>2SA1253/2SC3135</b>
		PNP/NPN Epitaxial Planar Silicon Transistors
<b>High-<math>h_{FE}</math>, AF Amp Applications</b>		

**Features**

- High  $V_{EBO}$
- Wide ASO and high durability against breakdown

( ): 2SA1253

**Absolute Maximum Ratings/ $T_a = 25^\circ\text{C}$**

			unit
Collector to base voltage	$V_{CBO}$	(-) $60$	V
Collector to emitter voltage	$V_{CEO}$	(-) $50$	V
Emitter to base voltage	$V_{EBO}$	(-) $15$	V
Collector current	$I_C$	(-) $200$	mA
Collector Current(Pulse)	$I_{CP}$	(-) $400$	mA
Collector dissipation	$P_C$	$250$	mW
Junction temperature	$T_j$	$150$	$^\circ\text{C}$
Storage temperature	$T_{stg}$	$-55$ to $+150$	$^\circ\text{C}$

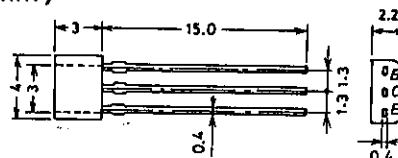
**Electrical Characteristics/ $T_a = 25^\circ\text{C}$**

			min	typ	max	unit
Collector cutoff current	$I_{CBO}$	$V_{CB} = (-)40\text{V}, I_E = 0$			(-) $0.1$	$\mu\text{A}$
Emitter cutoff current	$I_{EBO}$	$V_{EB} = (-)10\text{V}, I_C = 0$			(-) $0.1$	$\mu\text{A}$
DC current gain	$h_{FE}$	$V_{CE} = (-)6\text{V}, I_C = (-)1\text{mA}$	$100^*$		$560^*$	
Gain-bandwidth product	$f_T$	$V_{CE} = (-)6\text{V}, I_C = (-)1\text{mA}$		$100$		MHz
Common base output capacitance	$c_{ob}$	$V_{CB} = (-)6\text{V}, f = 1\text{MHz}$		$(3.8)$		pF
Collector to emitter saturation voltage	$V_{CE(sat)}$	$I_C = (-)50\text{mA}, I_B = (-)5\text{mA}$		$(-0.2)$	$(-0.5)$	V
Collector to base breakdown voltage	$V_{(BR)CBO}$	$I_C = (-)10\mu\text{A}, I_E = 0$	$(-)60$			V
Collector to emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = (-)1\text{mA}, R_{BE} = \infty$	$(-)50$			V
Emitter to base breakdown voltage	$V_{(BR)EBO}$	$I_E = (-)10\mu\text{A}, I_C = 0$	$(-)15$			V

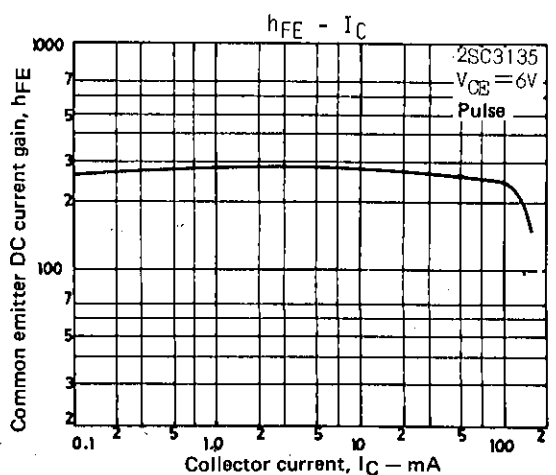
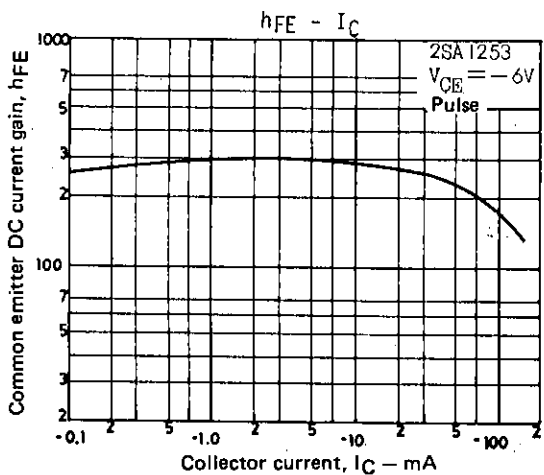
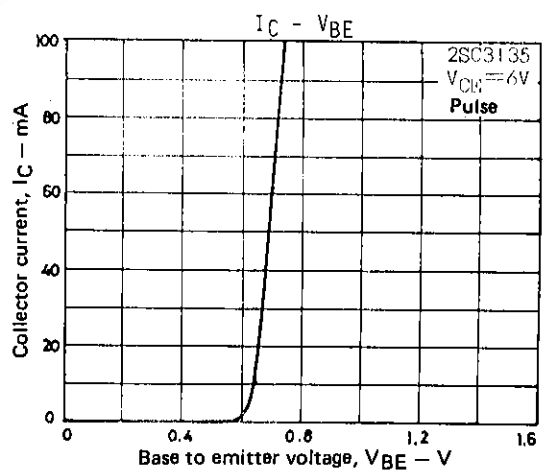
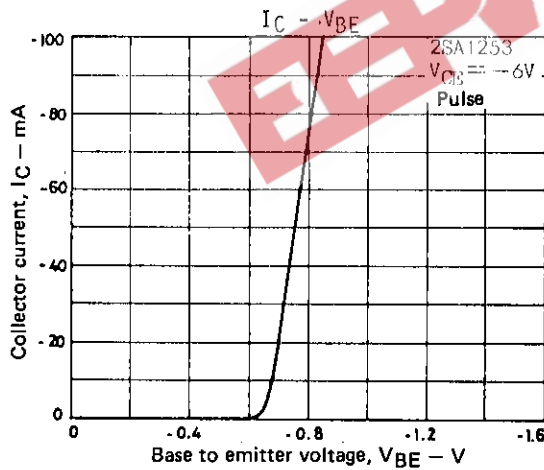
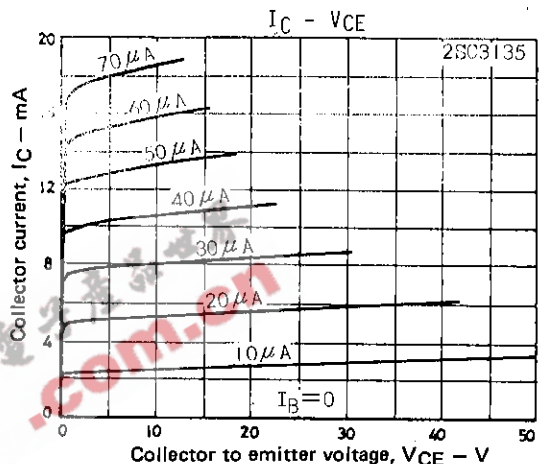
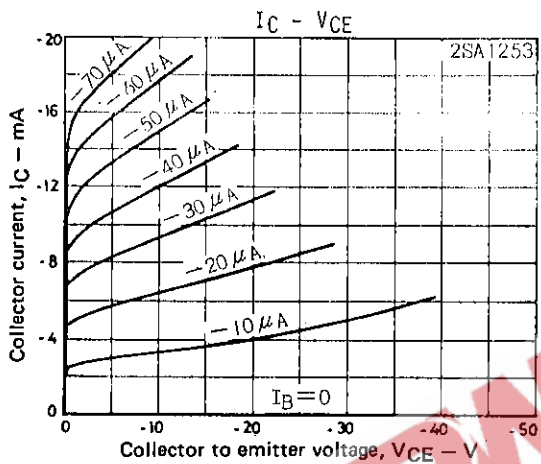
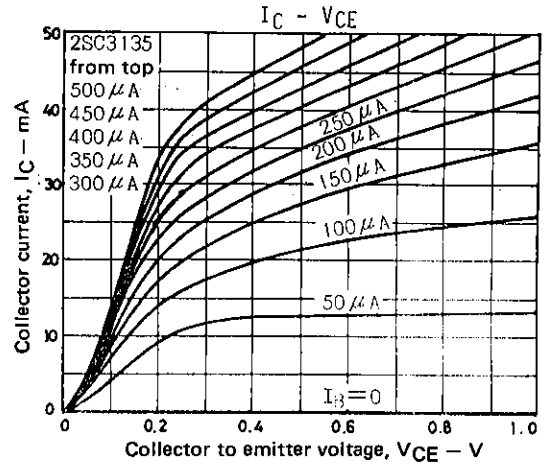
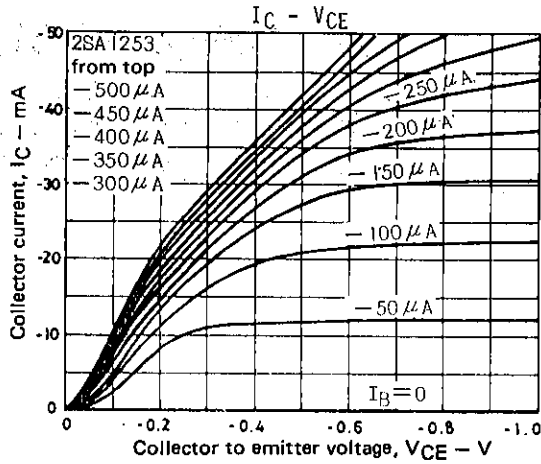
\* The 2SA1253/2SC3135 are classified by 1 mA  $h_{FE}$  as follows:

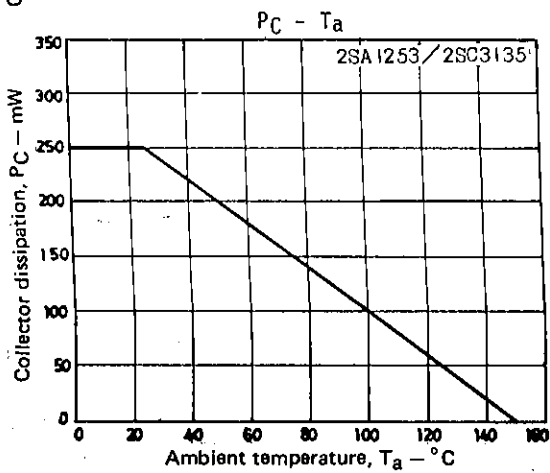
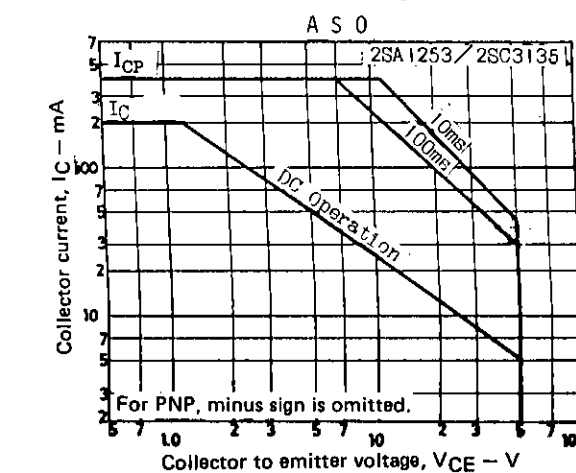
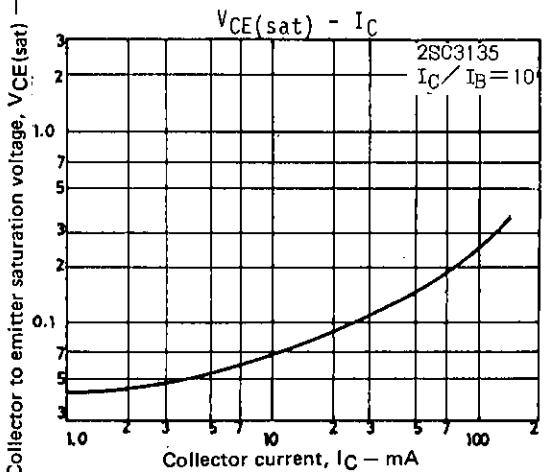
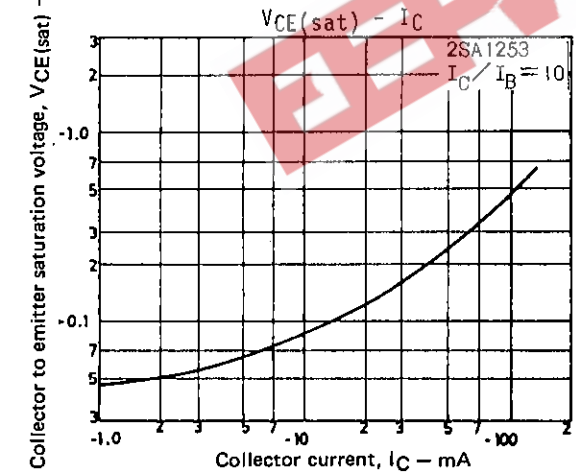
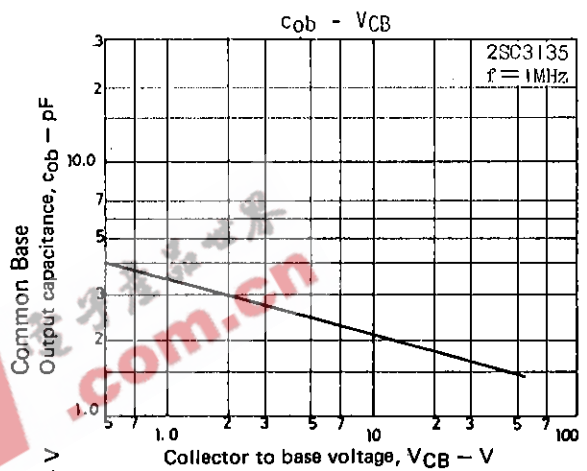
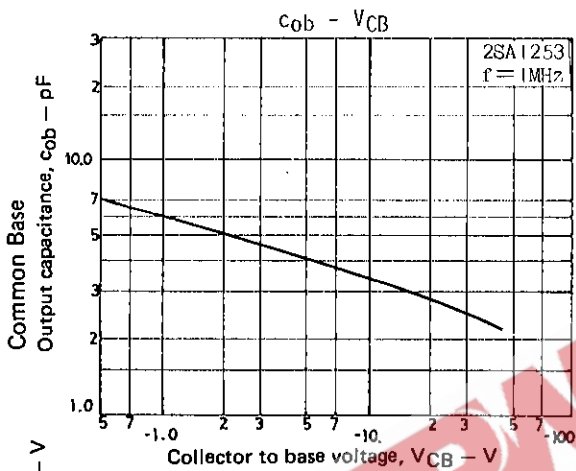
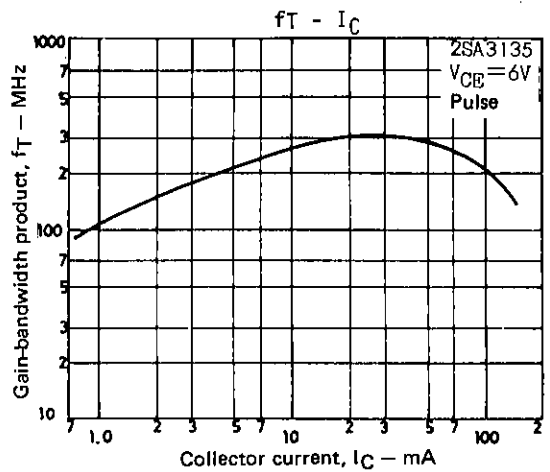
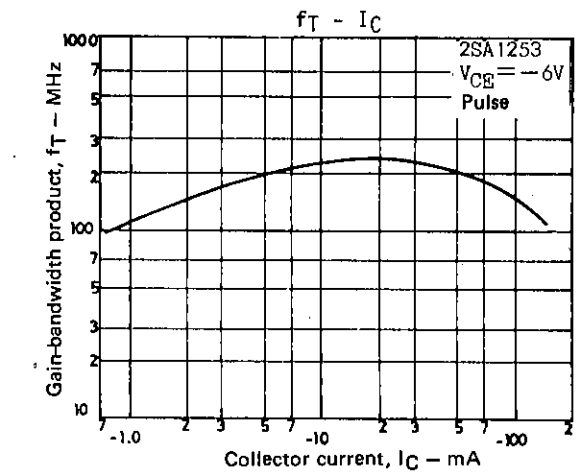
100 R	200	140 S	280	200 T	400	280 U	560
-------	-----	-------	-----	-------	-----	-------	-----

**Package Dimensions 2033**  
(unit: mm)



B: Base  
C: Collector  
E: Emitter  
SANYO: SPA





EEPW 电子产品世界  
.com.cn

- No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.
- Anyone purchasing any products described or contained herein for an above-mentioned use shall:
  - ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use;
  - ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.
- Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.