

2SA1514K 2SA1579

Transistor, PNP

Features

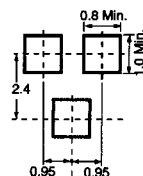
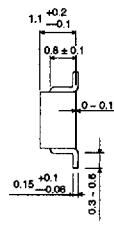
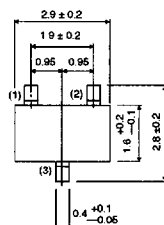
- available in SMT3 (SMT, SC-59) and UMT3 (UMT, SC-70) packages
- package marking: 2SA1514K and 2SA1579; R★, where ★ is h_{FE} code
- high breakdown voltage:
 $V_{CEO} = -120\text{ V}$
- complementary pair with 2SC3906K and 2SC4102

Applications

- high voltage amplifier

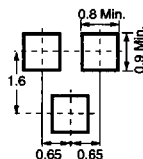
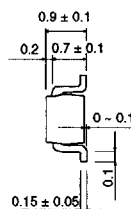
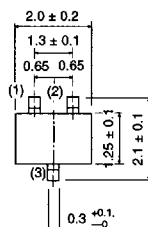
Dimensions (Units : mm)

2SA1514K (SMT3)



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

2SA1579 (UMT3)



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

Absolute maximum ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Collector-to-base voltage	V_{CBO}	-120	V
Collector-to-emitter voltage	V_{CEO}	-120	V
Emitter-to-base voltage	V_{EBO}	-5	V
Collector current	I_C	-50	mA
Collector dissipation	P_C	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 ~ +150	$^\circ\text{C}$

2SA1514K, 2SA1579 Transistor, PNP, 2SA series**Electrical characteristics (unless otherwise noted, $T_a = 25^\circ\text{C}$)**

Parameter	Symbol	Min	Typical	Max	Unit	Conditions
Collector-to-base breakdown voltage	BV_{CBO}	-120			V	$I_C = -50\ \mu\text{A}$
Collector-to-emitter breakdown voltage	BV_{CEO}	-120			V	$I_C = -1\ \text{mA}$
Emitter-to-base breakdown voltage	BV_{EBO}	-5			V	$I_E = -50\ \mu\text{A}$
Collector cutoff current	I_{CBO}			-0.5	μA	$V_{CB} = -100\ \text{V}$
Emitter cutoff current	I_{EBO}			-0.5	μA	$V_{EB} = -4\ \text{V}$
DC current gain	h_{FE}	180		820		$V_{CE} = -6\ \text{V}$, $I_C = -2\ \text{mA}$
Collector-to-emitter saturation voltage	$V_{CE(sat)}$			-0.5	V	$I_C/I_B = -10\ \text{mA}/-1\ \text{mA}$
Transition frequency	f_T		140		MHz	$V_{CE} = -12\ \text{V}$, $I_E = 2\ \text{mA}$, $f = 30\ \text{MHz}$
Output capacitance	C_{ob}		3.2		pF	$V_{CB} = -12\ \text{V}$, $I_E = 0\ \text{mA}$, $f = 1\ \text{MHz}$

 h_{FE} rankings

Item	R	S	E
h_{FE}	180 ~ 390	270 ~ 560	390 ~ 820

Electrical characteristic curves

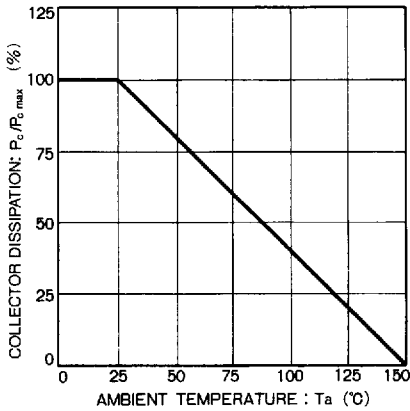


Figure 1

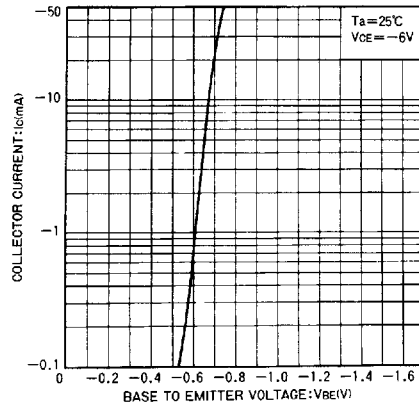


Figure 2

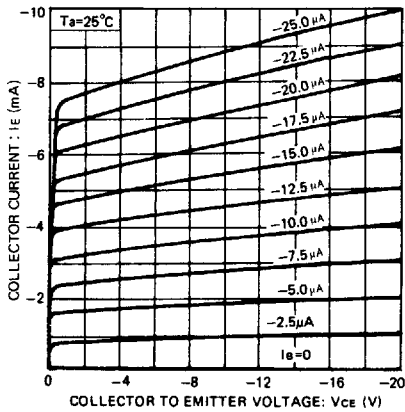


Figure 3

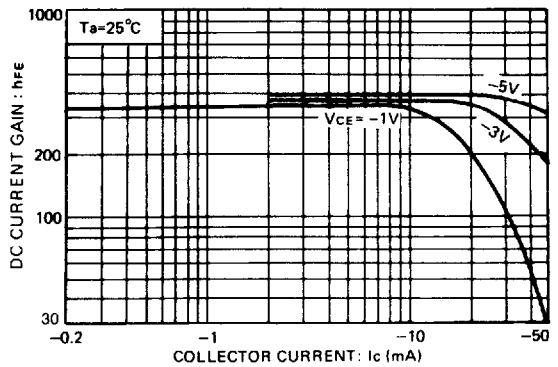


Figure 4

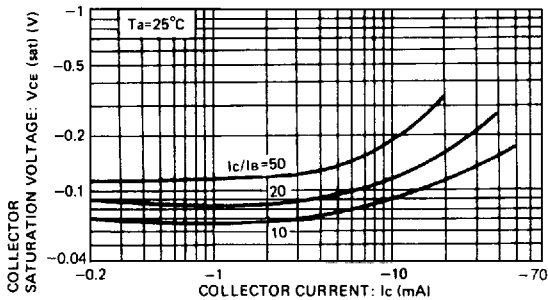


Figure 5

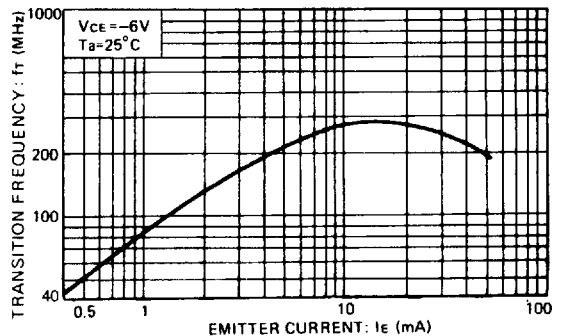


Figure 6

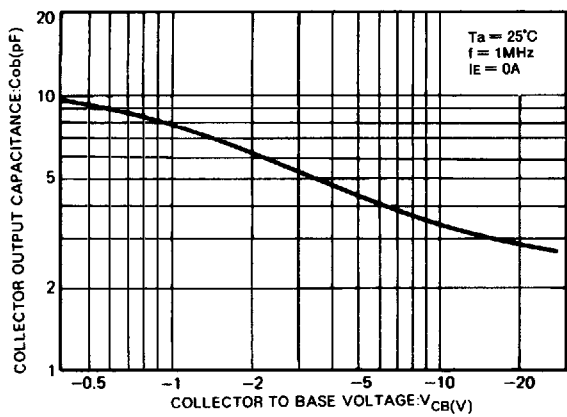


Figure 7

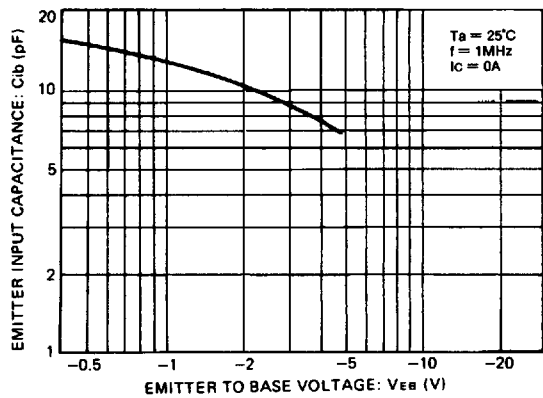


Figure 8

Ordering information

Package	Tape	
Code	T146	T106
Basic order quantity	3000	3000
2SA1514K	★	
2SA1579		★
★ = Standard, ☆ = Semi-standard, * = Special order		