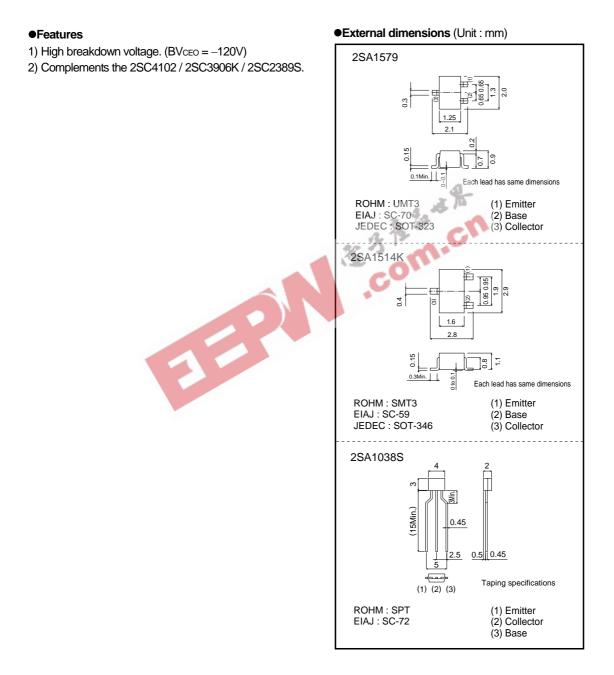
High-voltage Amplifier Transistor (–120V, –50mA)

2SA1579 / 2SA1514K / 2SA1038S



● Absolute maximum ratings (Ta=25°C)

Pai	rameter	Symbol	Limits	Unit	
Collector-base voltage		Vсво	-120	V	
Collector-emitter voltage		Vceo	-120	V	
Emitter-base voltage		VEBO	-5	V	
Collector current		Ic	-50	mA	
Collector power dissipation	2SA1579 / 2SA1514K	Pc	0.2	W	
	2SA1038S	PC	0.3		
Junction temperature		Tj	150	°C	
Storage temperature		Tstg	-55 to +150	°C	

●Packaging specifications and hfe

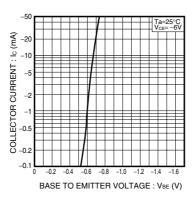
Туре	2SA1579	2SA1514K	2SA1038S
Package	UMT3	SMT3	SPT
hfE	RS	RS	RS
Marking	R*	R*	-
Code	T106	T146	TP
Basic ordering unit (pieces)	3000	3000	5000

^{*}Denotes hre

●Electrical characteristics (Ta=25°C)

*Denotes hre					25.	40.18	R-	
●Electrical characteristics (Ta=25°C)								
Parameter		Symbol	Min.	Тур.	Max.	Unit	Conditions	
Collector-base breakdown vo	oltage	ВУсво	-120	_630	0	V	Ic= -50μA	
Collector-emitter breakdown voltage		BVceo	-120	—	G	V	Ic=-1mA	
Emitter-base breakdown voltage		BVEBO	-5) -	_	V	Iε= −50μA	
Collector cutoff current		Ісво	1)7 /	-	-0.5	μΑ	VcB= -100V	
Emitter cutoff current		ІЕВО	/ - \	_	-0.5	μΑ	V _{EB} = -4V	
Collector-emitter saturation voltage		VCE(sat)	_	-	-0.5	V	Ic/I _B = -10mA/-1mA	
DC current transfer ratio		hfe	180	_	560	_	Vce=-6V, Ic=-2mA	
Transition frequency		f⊤	_	140	_	MHz	Vc=-12V, I=2mA, f=100MHz	
Output capacitance		Cob	_	3.2	_	pF	Vсв= −12V, I∈=0A, f=1MHz	

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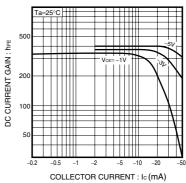
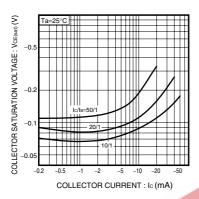
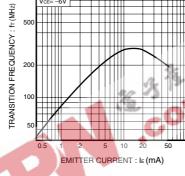


Fig.1 Ground emitter output characteristics Fig.2 Ground emitter propagation characteristics

Fig.3 DC current gain vs. collector current





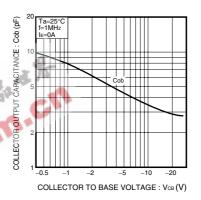


Fig.4 Collector-Emitter saturation voltage vs. collector current

Fig.5 Transition frequency vs. emitter current

Fig.6 Collector output capacitance vs. collector-base voltage

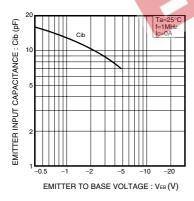


Fig.7 Emitter input capacitance vs. emitter-base voltage

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