



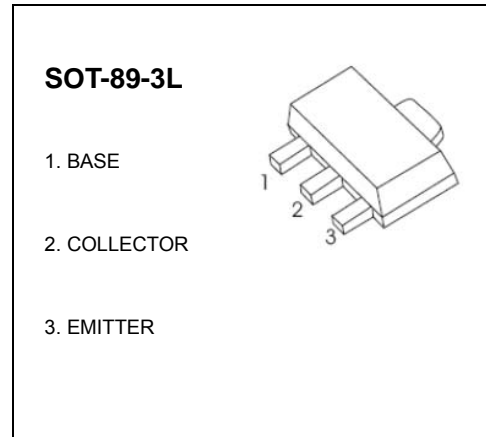
SOT-89-3L Plastic-Encapsulate Transistors

2SA1740 TRANSISTOR (PNP)

FEATURES

- High breakdown voltage
- Excellent h_{FE} linearity

Marking: AK



MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-400	V
V _{CE0}	Collector-Emitter Voltage	-400	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-200	mA
P _C	Collector Dissipation	500	mW
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-10μA, I _E =0	-400			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-1mA, I _B =0	-400			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-10μA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} =-300V, I _E =0			-100	nA
Emitter cut-off current	I _{EBO}	V _{EB} =-4V, I _C =0			-100	nA
DC current gain	h _{FE}	V _{CE} =-10V, I _C =-50mA	60		200	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =-50mA, I _B =-5mA			-0.6	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =-50mA, I _B =-5mA			-1	V
Transition frequency	f _T	V _{CE} =-30V, I _C =-10mA		70		MHz
Collector output capacitance	C _{ob}	V _{CB} =-30V, I _E =0, f=1MHz		5		pF
Turn-ON Time	t _{on}	V _{CC} =-150V, I _C =-50mA, I _{B1} =-I _{B2} =-5mA		0.25		μs
Turn-OFF Time	t _{off}			5		μs

CLASSIFICATION OF h_{FE}

Rank	D	E
Range	60-120	100-200