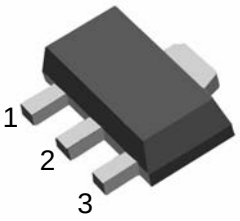
Transys Electronics LIMITED

SOT-89 Plastic-Encapsulated Transistors

2SA1740 TRANSISTOR (PNP)

SOT-89

1. BASE
2. COLLECTOR
3. EMITTER



FEATURES

Power dissipation

P_{CM} : 500 mW (Tamb=25℃)

Collector current

I_{CM} : -200 mA

Collector-base voltage

$V_{(BR)CBO}$: -400 V

Operating and storage junction temperature range

T_J, T_{stg}: -55℃ to +150℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	Ic=-10μA, I_E=0	-400			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	Ic=-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			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-4V, I_C=0			-0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-10V, I_C=-50mA	60		200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-50mA, I_B=-5mA			-0.8	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 $h_{FE(1)}$

Rank	D	E
Range	60-120	100-200
Marking	**AK**	