Elektronische Bauelemente

BCX54

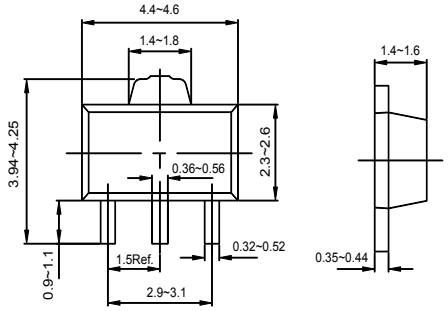
NPN Transistors

Plastic-Encapsulate Transistors

RoHS Compliant Product

1.BASE
2.COLLECTOR
3.EMITTER

SOT-89



Dimensision in Millimeter

Features

Power dissipation

$P_{CM:}$ 0.5 W (Tamb=25°C)

Collector current

I_{CM}: 1 A

Collector-base voltage

$V_{(BR)CBO}$: 45 V

Operating and storage junction temperature range

T_J, T_{stg}: -55°C to +150°C

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

Parameter		Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage		$V_{(BR)CBO}$	Ic=100μA , I_E=0	45		V
Collector-emitter breakdown voltage		$V_{(BR)CEO}$	I_C= 1mA , I_B=0	45		V
Emitter-base breakdown voltage		$V_{(BR)EBO}$	I_E=10μA, I_C=0	5		V
Collector cut-off current		I_{CBO}	V_{CB}=30V, I_E=0		0.1	μA
Emitter cut-off current		I_{EBO}	V_{EB}=5V, I_C=0		0.1	μA
DC current gain	**BCX54** **BCX54-10** **BCX54-16**	$h_{FE\ (1)}$	V_{CE}=2V, I_C= 150mA	63 63 100	250 160 250	
		$h_{FE(2)}$	V_{CE}=2V, I_C= 5mA	40		
		$h_{FE(3)}$	V_{CE}=2V, I_C= 500mA	25		
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_C=500 mA, I_B= 50mA		0.5	V
Base-emitter voltage		$V_{BE(ON)}$	I_C= 500 mA, V_{CE}=2V		1	V
Transition frequency		f_T	V_{CE}= 10V, I_C= 50mA f = 100MHz	130		MHz

DEVICE MARKING	BCX54=BA BCX54-10=BC BCX54-16=BD