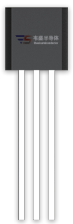
2SC3199 TRANSISTOR (NPN)



TO-92

1.EMITTER
2.COLLECTOR
3.BASE

FEATURES

- High Current Capability
- High DC Current Gain
- Small Package

APPLICATIONS

- Audio Amplifier Applications
- AM Amplifier Applications

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SC3199	TO-92	Bulk	1000pcs/Bag
2SC3199-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	0.15	A
P_C	Collector Power Dissipation	400	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	312	℃ /W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

T_a=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 0.1mA,I_E=0	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=0.1mA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=50V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			0.1	μA
DC current gain	h_{FE}	V_{CE}=6V, I_C=2mA	70		700	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=100mA,I_B=10mA			0.25	V
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0, f=1MHz			3.5	pF
Transition frequency	f_T	V_{CE}=10V,I_C=1mA	80			MHz

CLASSIFICATION OF h_{FE}

RANK	O	Y	GR	BL
RANGE	70-140	120-240	200-400	300-700