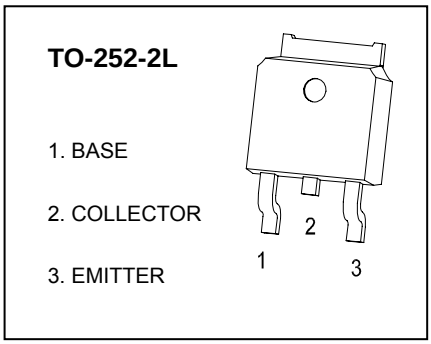
TO-252-2L Plastic-Encapsulate Transistors

2SC3303 TRANSISTOR (NPN)



FEATURES

- Low Collector Saturation Voltage
- High Speed Switching Time

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	80	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current	5	A
P_C	Collector Power Dissipation	1	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	125	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	100			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	80			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	7			V
Collector cut-off current	I_{CBO}	V_{CB}=100V,I_E=0			1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=7V,I_C=0			1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=1V, I_C=1A	70		240	
	$h_{FE(2)}$	V_{CE}=1V, I_C=3A	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=3A,I_B=150mA			0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=3A,I_B=150mA			1.2	V
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0, f=1MHz		80		pF
Transition frequency	f_T	V_{CE}=4V,I_C=1A,		20		MHz

CLASSIFICATION OF $h_{FE(1)}$

RANK	O	Y
RANGE	70-140	120-240