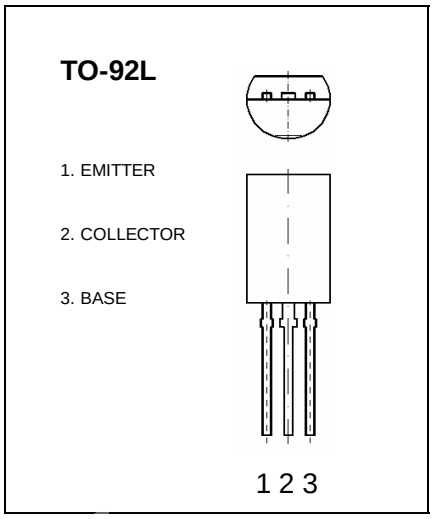
Transys Electronics LIMITED

TO-92L Plastic-Encapsulate Transistors

2SC1383 TRANSISTOR (NPN)
2SC1384



FEATURE

Power dissipation

P_{CM}: 1 W (Tamb=25℃)

Collector current

I_{CM}: 1 A

Collector-base voltage

$V_{(BR)CBO}$: 2SC1383: 30 V

2SC1384: 50 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	MAX	UNIT
Collector-base breakdown voltage 2SC1383	$V(BR)_{CBO}$	I_C= 10μA , I_E=0	30		V
Collector-base breakdown voltage 2SC1384			50		
Collector-emitter breakdown voltage 2SC1383	$V(BR)_{CEO}$	I_C=2mA , I_B=0	25		V
Collector-emitter breakdown voltage 2SC1384			50		
Emitter-base breakdown voltage	$V(BR)_{EBO}$	I_E= 10μA, I_C=0	5		V
Collector cut-off current	I_{CBO}	V_{CB}=20V , I_E=0		0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=10 V, I_C= 500mA	85	340	
	$h_{FE(2)}$	V_{CE}=5 V, I_C= 1A	50		
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C= 500m A, I_B=50mA		0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C= 500mA , I_B= 50mA		1.2	V
Transition frequency	f_T	V_{CE}= 10 V, I_C= 50mA	100		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	Q	R	S
Range	85-170	120-240	170-340