



TO-92L Plastic-Encapsulate Transistors

2SC1383

TRANSISTOR (NPN)

2SC1384

FEATURE

Power dissipation

P_{CM} : 1 W ($T_{amb}=25^{\circ}C$)

Collector current

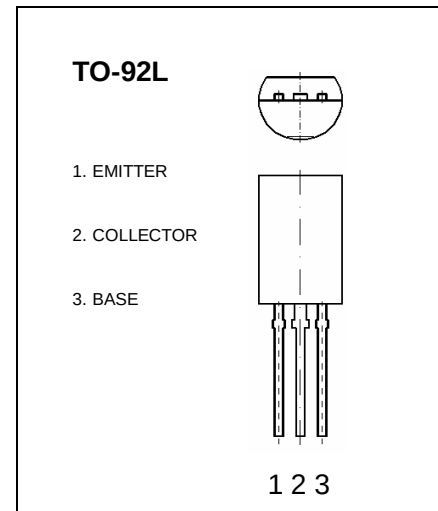
I_{CM} : 1 A

Collector-base voltage

$V_{(BR)CBO}$: 2SC1383: 30 V
2SC1384: 50 V

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$



ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

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

CLASSIFICATION OF $h_{FE(1)}$

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