

### 2SC2383 TRANSISTOR (NPN)

#### FEATURE

Power dissipation

$P_{CM}$ : 0.9 W ( $T_{amb}=25^{\circ}C$ )

Collector current

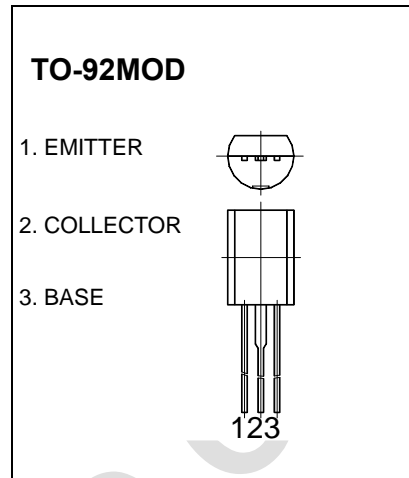
$I_{CM}$ : 1 A

Collector-base voltage

$V_{(BR)CBO}$ : 160 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	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	160		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=10\text{ mA}, I_B=0$	160		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	6		V
Collector cut-off current	$I_{CBO}$	$V_{CB}=150\text{ V}, I_E=0$		1	$\mu A$
Collector cut-off current	$I_{CER}$	$V_{CB}=150\text{ V}, R_{EB}=10M\Omega$		10	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=6\text{ V}, I_C=0$		1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=5\text{ V}, I_C=200\text{ mA}$	60	320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=500\text{ mA}, I_B=50\text{ mA}$		1	V
Base-emitter voltage	$V_{BE}$	$I_C=5\text{ mA}, V_{CE}=5\text{ V}$		0.75	V
Transition frequency	$f_T$	$V_{CE}=5\text{ V}, I_C=200\text{ mA}$	20		MHz

#### CLASSIFICATION OF $h_{FE}$

Rank	R	O	Y
Range	60-120	100-200	160-320