

### 2SD789 TRANSISTOR (NPN)

#### FEATURE

Power dissipation

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

Collector current

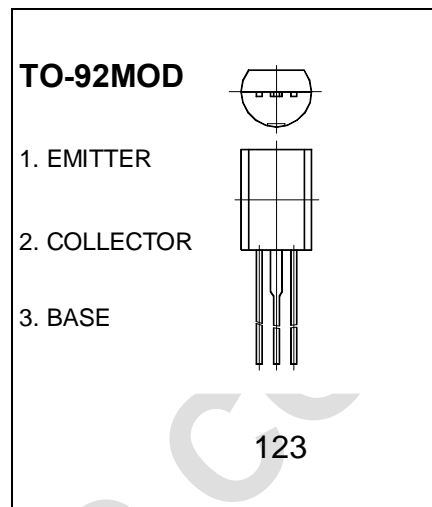
$I_{CM}$ : 1 A

Collector-base voltage

$V_{(BR)CBO}$ : 100 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	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	100		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	50		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	6		V
Collector cut-off current	$I_{CBO}$	$V_{CB}=80V, I_E=0$		1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=6V, I_C=0$		0.2	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=2V, I_C=100mA$	100	800	
Collector-emitter saturation voltage	$V_{CEsat}$	$I_C=1A, I_B=100mA$		0.3	V
Transition frequency	$f_T$	$V_{CE}=2V, I_C=10mA$	80		MHz
Output capacitance	$C_{ob}$	$V_{CE}=10V, I_E=0, f=1MHz$		30	pF

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

Rank	B	C	D	E
Range	100-200	160-320	250-500	400-800