

D882 TRANSISTOR (NPN)**FEATURES**

Power dissipation

 P_{CM} : 500 mW ($T_{amb}=25^{\circ}C$)

Collector current

 I_{CM} : 3 A

Collector-base voltage

 $V_{(BR)CBO}$: 40 V

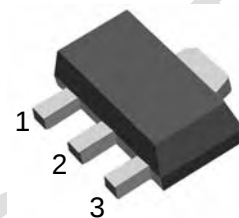
Operating and storage junction temperature range

 T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$ **SOT-89**

1. BASE

2. COLLECTOR

3. EMITTER

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

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10\text{ mA}, I_B = 0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB} = 40\text{ V}, I_E = 0$			1	μA
Collector cut-off current	I_{CEO}	$V_{CE} = 30\text{ V}, I_B = 0$			10	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 6\text{ V}, I_C = 0$			1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = 2\text{ V}, I_C = 1\text{ A}$	60		400	
	$h_{FE(2)}$	$V_{CE} = 2\text{ V}, I_C = 100\text{ mA}$	32			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 2\text{ A}, I_B = 0.2\text{ A}$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 2\text{ A}, I_B = 0.2\text{ A}$			1.5	V
Transition frequency	f_T	$V_{CE} = 5\text{ V}, I_C = 0.1\text{ A}$ $f = 10\text{ MHz}$	50			MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400