

# nova TO-126 Plastic-Encapsulate Transistors

## D882 TRANSISTOR ( NPN )

### FEATURES

Power dissipation

$$P_{CM} : 1.25 \text{ W ( } T_{amb}=25 \text{ )}$$

Collector current

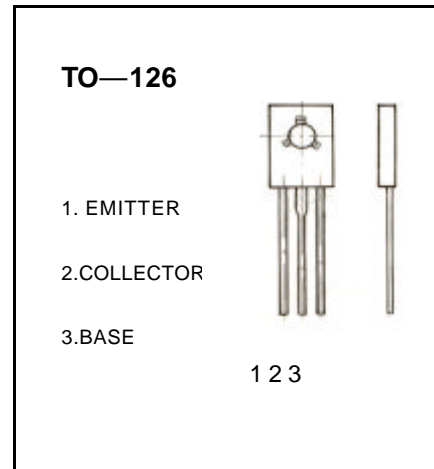
$$I_{CM} : 3 \text{ A}$$

Collector-base voltage

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

Operating and storage junction temperature range

$$T_J, T_{stg}: -55 \text{ to } +150$$



### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25$ 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	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CE}=30 \text{ V}, I_B=0$			10	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=6 \text{ V}, I_C=0$			1	$\mu A$
DC current gain	$h_{FE(1)}$	$V_{CE}=2 \text{ V}, I_C=1 \text{ A}$	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	$f_T$	$V_{CE}=5 \text{ V}, I_C=0.1 \text{ mA}$ $f = 10 \text{ MHz}$	50			MHz

### CLASSIFICATION OF $h_{FE(1)}$

Rank	Y	G
Range	100-200	160-320

