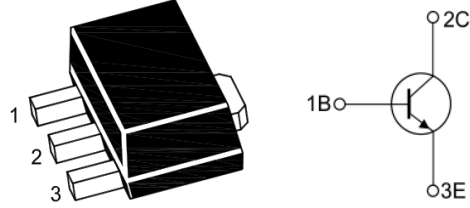


Marking code: 2SD882

FEATURES

1. High current output up to 3A
2. Low saturation voltage
3. Complement to 2SB772

Silicon NPN Power Transistor



1: base 2: collector 3: emitter
SOT-89

Maximum ratings($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Breakdown Voltage	V_{CB0}	40	V
Collector-Emitter Breakdown Voltage	V_{CE0}	30	V
Emitter-Base Breakdown Voltage	V_{EB0}	6	V
Collector Current	I_C	3	A
Collector Power Dissipation	P_C	1.25	W
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-55~150	$^{\circ}\text{C}$

Electrical Characteristics ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	V_{CB0}	$I_C=100\mu\text{A}$ $I_E=0$	40		V
Collector-Emitter Breakdown Voltage	V_{CE0}	$I_C=10\text{mA}$ $I_B=0$	30		V
Emitter-Base Breakdown Voltage	V_{EB0}	$I_E=-100\mu\text{A}$ $I_C=0$	6		V
Collector Cutoff Current	I_{CB0}	$V_{CB}=40\text{V}$ $I_E=0$		1	μA
Collector Cutoff Current	I_{CE0}	$V_{CB}=30\text{V}$ $I_B=0$		10	μA
Emitter Cutoff Current	I_{EB0}	$V_{EB}=5\text{V}$ $I_C=0$		1	μA
DC Current Gain	HFE(1)	$V_{CE}=2\text{V}$ $I_C=1\text{A}$	60	400	
	HFE(2)	$V_{CE}=2\text{V}$ $I_C=20\text{mA}$	30		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2\text{A}$ $I_B=200\text{mA}$		0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=2\text{A}$ $I_B=200\text{mA}$		1.5	V
Transition frequency	f_T	$V_{CE}=5\text{V}$ $I_C=100\text{mA}$ $f=10\text{MHz}$	50		MHz

Typical Characteristics

