2SD886 TRANSISTOR (NPN)

TO-126

1.EMITTER
2.COLLECTOR
3.BASE

FEATURES

- Low Voltage
- High Current

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SD886	TO-126	Bulk	200pcs/Bag
2SD886-TU	TO-126	Tube	60pcs/Tube

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	50	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	3	A
P_C	Collector Power Dissipation	1	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	125	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

T_a=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=5mA,I_B=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=50V,I_E=0			1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=3V,I_C=0			1	μA
DC current gain	$h_{FE(1)}^*$	V_{CE}=2V, I_C=20mA	100			
	$h_{FE(2)}^*$	V_{CE}=2V, I_C=1A	100		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=2A,I_B=200mA			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=2A,I_B=200mA			2	V
Collector output capacitance	C_{ob}	V_{CB}=10V,I_E=0, f=1MHz		45		pF
Transition frequency	f_T	V_{CE}=5V,I_C=100mA		80		MHz

*Pulse test: pulse width ≤300μs, duty cycle≤ 2.0%.