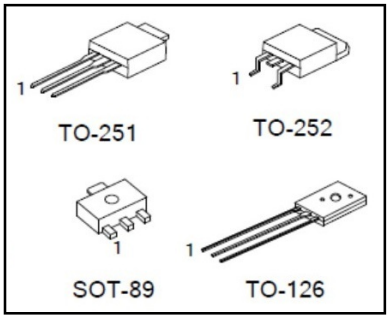
鼎德丰
DING DE FENG

NPN Silicon Transistor

2SD669

- **Complementary to 2SB649**
- **Package: TO-126/TO-251/TO-252/SOT-89**



Maximum Ratings (Ta = 25°)

Parameter	Symbol	Rating		Unit
Collector-base voltage	BV_{CBO}	180		V
Collector-emitter voltage	BV_{CEO}	120		V
Emitter-base voltage	BV_{EBO}	5		V
Collector current	I_{CM}	1.5		A
Collector Power Dissipation	P_C	TO-126	1	W
		SOP-89	0.5	
		TO-251	1	
		TO-252	2	
Junction Temperature	Tj	150		℃
Storage Temperature	Tstg	-55～+150		℃

Pin Assignment			
Package	1	2	3
TO-126	E	C	B
TO-251/252	B	C	E
SOT-89	B	C	E

Electrical Characteristics（Ta=25℃）

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=1mA，I_E=0	180			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=10mA，I_B=0	160			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=1mA，I_C=0	5			V
collector-base cut-off current	I_{CBO}	V_{CB}=180V，I_E=0			1	μA
collector-emitter cut-off current	I_{CEO}	V_{CE}=160V，I_B=0			10	μA
emitter-base cut-off current	I_{EBO}	V_{EB}=5V，I_C=0			1	μA
DC current gain	H_{FE1}	V_{CE}=5V，I_C=150mA	60		320	
	H_{FE2}	V_{CE}=5V，I_C=500mA	30			
collector-emitter saturation voltage	V_{CESAT}	I_C=500mA，I_B=-50mA			0.9	V
Base-Emitter Voltage	V_{BE}	V_{CE}=5V，I_C=150mA			1.5	
Transition frequency	f_T	V_{CE}=5V，I_C=150 mA		140		MHz

Classification of H_{FE}

Rank	2SD669-B	2SD669-C	2SD669-D
Range	60-120	100-200	160-320