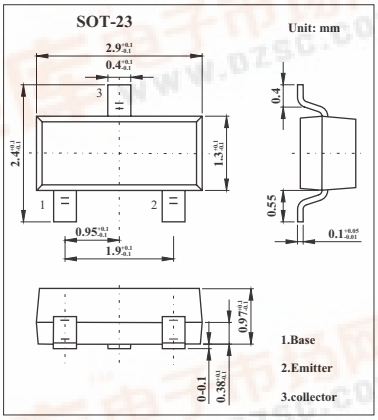
NPN Epitaxial Planar Silicon Transistors

2SC4983



■ Features

- AF power amplifier, medium-speed switching, small-sized motor drivers and LED drivers.
- Large current capacity.
- Low collector-to-emitter saturation voltage.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	15	V
Collector-emitter voltage	V_{CEO}	15	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	1	A
Collector current (pulse)	I_{CP}	3	A
Base current	I_B	200	mA
Collector dissipation	P_C	250	mW
Jumction temperature	T_j	150	℃
Storage temperature	T_{stg}	-55 to +150	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 12V , I_E = 0			100	nA
Emitter cutoff current	I_{EBO}	V_{EB} = 4V , I_C = 0			100	nA
DC current Gain	h_{FE}	V_{CE} = 2V , I_C = 50mA	135		600	
Gain bandwidth product	f_T	V_{CE} = 2V , I_C = 50mA		200		MHz
Common base output capacitance	Cob	V_{CB} = 10V , f = 1MHz		10		pF
Collector-to-emitter saturation voltage	$V_{CE(sat)}$	I_C = 5mA , I_B = 0.5mA		10	25	mV
		I_C = 500mA , I_B = 25mA		120	240	mV
Base-to-emitter saturation voltage	$V_{BE(sat)}$	I_C = 500mA , I_B = 25mA		0.9	1.2	V
Collector-to-base breakdown voltage	$V_{(BR)CBO}$	I_C = -10μA , I_E = 0	15			V
Collector-to-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = -1mA , R_{BE} = ∞	15			V
Emitter-to-base breakdown voltage	$V_{(BR)EBO}$	I_E = -10μA , I_C = 0	5			V

■ h_{FE} Classification

Marking	KN		
Rank	5	6	7
hFE	135～270	200～400	300～600