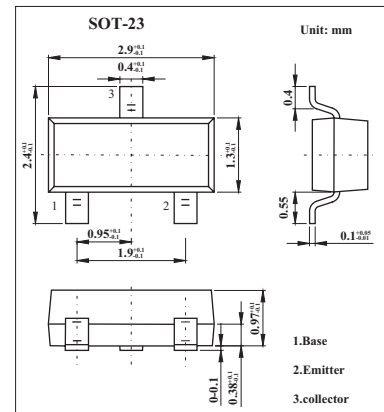


Power Transistor

2SD2444K

■ Features

- $I_c = 1A$.
- Low saturation voltage.



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	15	V
Collector-emitter voltage	V_{CE0}	15	V
Emitter-base voltage	V_{EB0}	6	V
Collector current	I_c	1	A
Collector power dissipation	P_c	0.2	W
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

* Single pulse $P_w=100\text{ms}$.

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	BV_{CB0}	$I_c=50\mu\text{A}$	15			V
Collector-emitter breakdown voltage	BV_{CE0}	$I_c=1\text{mA}$	15			V
Emitter-base breakdown voltage	BV_{EB0}	$I_E=50\mu\text{A}$	6			V
Collector cutoff current	I_{CB0}	$V_{CB}=12\text{V}$			0.5	μA
Emitter cutoff current	I_{EB0}	$V_{EB}=5\text{V}$			0.5	μA
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c/I_B=400\text{mA}/20\text{mA}$			0.3	V
DC current transfer ratio	h_{FE}	$V_{CE}=2\text{V}, I_c=50\text{mA}$	180		390	
Output capacitance	f_T	$V_{CE}=2\text{V}, I_E=-50\text{mA}, f=100\text{MHz}$		200		MHz
Transition frequency	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		15		pF

■ h_{FE} Classification

Marking	BSR
h_{FE}	180~390