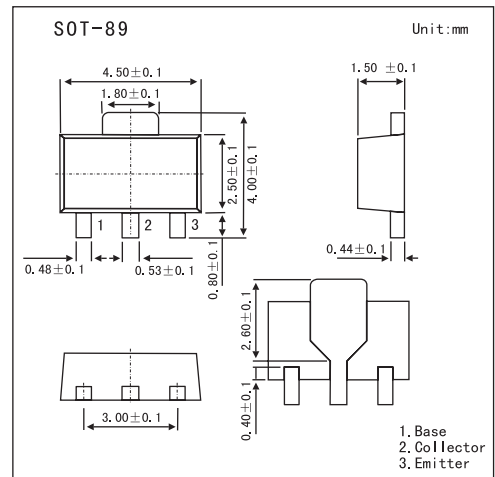


2SD2403

■ Features

- High current capacitance.
- Low collector saturation voltage.



■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector-base voltage	V _{CB0}	80	V
Collector-emitter voltage	V _{CEO}	60	V
Emitter-base voltage	V _{EB0}	6	V
Collector current	I _C	3	A
Collector current (pulse) *	I _{CP}	5	A
Base current	I _B	0.2	A
Base current (pulse) *	I _{BP}	0.4	A
Total power dissipation	P _T	2	W
Junction temperature	T _j	150	°C
Storage temperature	T _{stg}	-55 to +150	°C

* PW ≤ 10 ms, duty cycle ≤ 50 %

2SD2403

■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	ICBO	V _{CB} = 80 V, I _E = 0			100	nA
Emitter cutoff current	IEBO	V _{EB} = 6.0 V, I _C = 0			100	nA
DC current gain *	hFE 1	V _{CE} = 2.0 V, I _C = 0.1 A	80			
	hFE 2	V _{CE} = 2.0 V, I _C = 1.0 A	100	200	400	
Base to emitter voltage *	V _{BE}	V _{CE} = 2.0 V, I _C = 0.1 A	630	670	730	mV
Collector saturation voltage	V _{CE(sat) 1}	I _C = 2 A, I _B = 0.1 A		150	300	mV
	V _{CE(sat) 2}	I _C = 3 A, I _B = 0.15 A		210	500	mV
Base saturation voltage	V _{BE(sat)}	I _C = 2 A, I _B = 0.1 A		0.89	1.2	V
Gain bandwidth product	f _T	V _{CE} = 10 V, I _E = -0.3 A		130		MHz
Output capacitance	C _{ob}	V _{CB} = 10 V, I _E = 0, f = 1.0 MHz		30		pF
Turn-on time	t _{on}	I _C = 1.0 A, V _{CC} = 10 V I _{B1} = -I _{B2} = 0.1 A R _L = 5.0Ω		150		ns
Storage time	t _{stg}			652		ns
Fall time	t _f			40		ns

■ hFE Classification

Marking	GX	GY	GZ
hFE	100~200	160~320	200~400