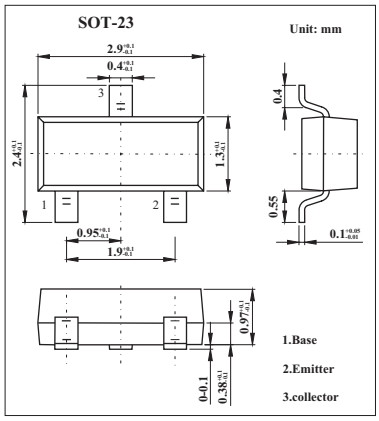
TY Semicondutor®

Product specification

2SD1048



■ Features

- Ultrasmall package allows miniaturization in end products.
- Large current capacity (I_C=0.7A) and low-saturation voltage.

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	20	V
Collector-emitter voltage	V_{CEO}	15	V
Emitter-base voltage	V_{EBO}	5	V
Collector current	I_C	0.7	A
Collector current (pulse)	I_{CP}	1.5	A
Collector dissipation	P_C	200	mW
Jumction temperature	T_j	125	℃
Storage temperature	T_{stg}	-55 to +125	℃

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector cutoff current	I_{CBO}	V_{CB} = 15V , I_E = 0			0.1	μA
Emitter cutoff current	I_{EBO}	V_{EB} = 4V , I_C = 0			0.1	μA
DC current Gain	h_{FE}	V_{CE} = 2V , I_C = 50mA	200		900	
Gain bandwidth product	f_T	V_{CE} = 10V , I_C = 50mA		250		MHz
Output capacitance	C_{ob}	V_{CB} = 10V , f = 1MHz		8		pF
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C = 5mA , I_B = 0.5mA		10	25	mV
	$V_{CE(sat)}$	I_C = 100mA , I_B = 10mA		30	80	mV

■ h_{FE} Classification

Marking	X6	X7	X8
hFE	200～400	300～600	450～900