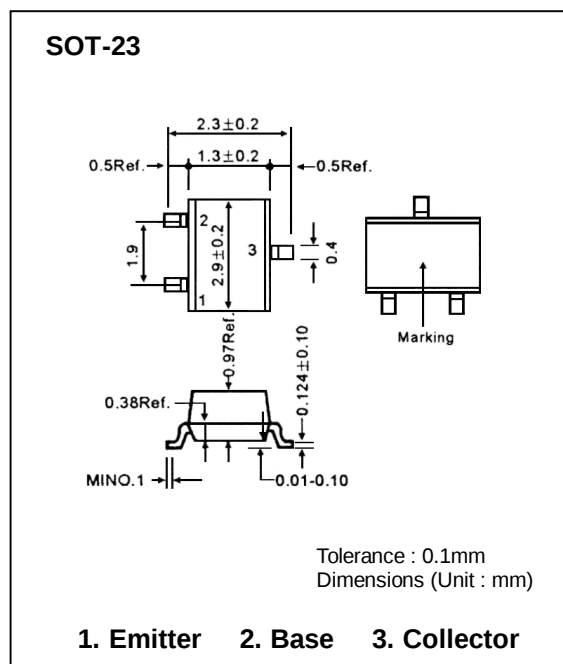


GENERAL PURPOSE TRANSISTOR

- Collector-Emitter Voltage: $V_{CEO} = 50V$
- Collector Dissipation: $P_C = 150mW$

Absolute Maximum Ratings (TA=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	150	mA
Collector Dissipation	P_C	150	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55~+150	°C



Electrical Characteristics (TA=25°C)

Characteristic	Symbol	Test Conditions	Min	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C = 100\mu A, I_E = 0$	60		V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = 1mA, I_B = 0$	50		V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = 100\mu A, I_C = 0$	5		V
Collector Cut-off Current	I_{CBO}	$V_{CB} = 60V, I_E = 0$		0.1	μA
Collector Cut-off Current	I_{CEO}	$V_{CE} = 45V, I_B = 0$		0.2	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 5V, I_C = 0$		0.1	μA
DC Current Gain	h_{FE}	$V_{CE} = 6V, I_C = 2mA$	70	700	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 100mA, I_B = 10mA$		0.25	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = 100mA, I_B = 10mA$		1	V
Transition Frequency	f_T	$V_{CE} = 10V, I_C = 1mA$ $f = 100MHz$	80		MHz

h_{FE} CLASSIFICATION

Classification	G	Y	GR	BL
h_{FE}	70-140	120-240	200-400	350-700

Device Marking

2SC3875-G=ALO ; 2SC3875-Y=ALY ; 2SC3875-GR=ALG ; 2SC3875-G=ALL