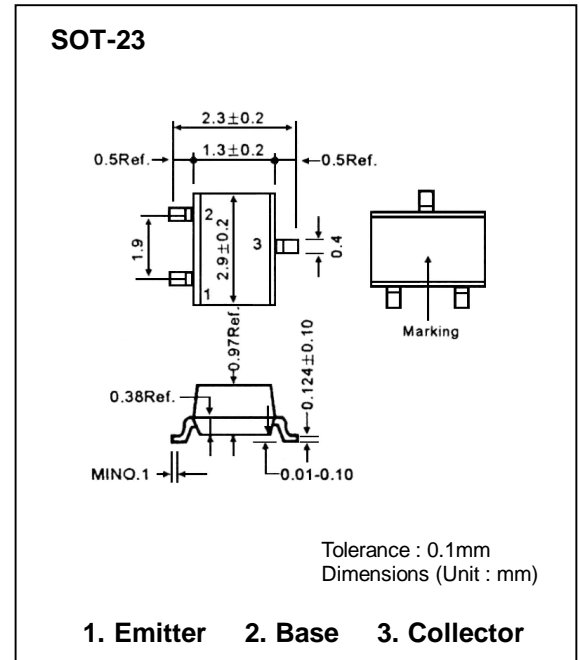


### GENERAL PURPOSE TRANSISTOR

- 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	$\mu A$
Collector Cut-off Current	$I_{CEO}$	$V_{CE} = 45V, I_B = 0$		0.2	$\mu A$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = 5V, I_C = 0$		0.1	$\mu A$
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