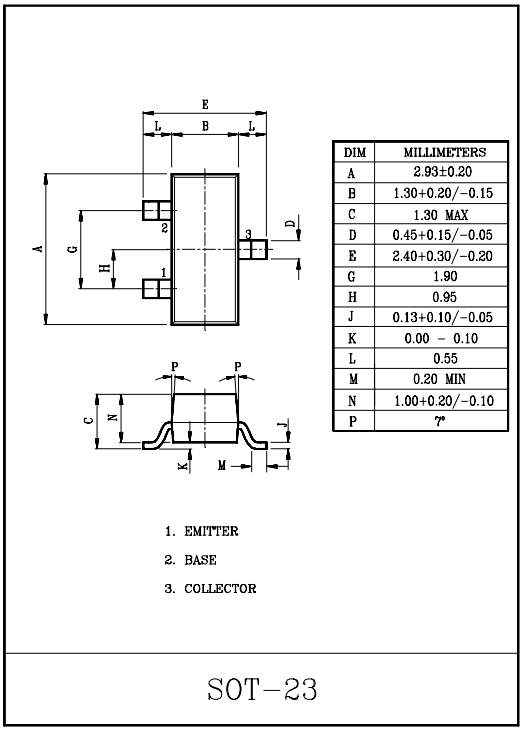
GENERAL PURPOSE APPLICATION.
SWITCHING APPLICATION.

FEATURES

- Excellent h_{FE} Linearity:$h_{FE}(2)$=25(Min.)
  at V_{CE}=6V, I_C=400mA.
- Low Saturation Voltage : $V_{CE}(sat)$=0.1V(Max.)
  at I_C=100mA, I_B=10mA.
- High Current : I_C=500mA.



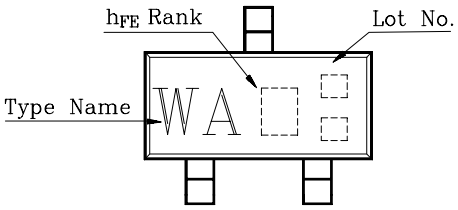
DIM	MILLIMETERS
A	2.93±0.20
B	1.30+0.20/−0.15
C	1.30 MAX
D	0.45+0.15/−0.05
E	2.40+0.30/−0.20
G	1.90
H	0.95
J	0.13+0.10/−0.05
K	0.00 − 0.10
L	0.55
M	0.20 MIN
N	1.00+0.20/−0.10
P	7°

SOT−23

MAXIMUM RATINGS (Ta=25℃)

CHARACTERISTICS	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	35	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	500	mA
Base Current	I_B	50	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	−55∼150	℃

Marking

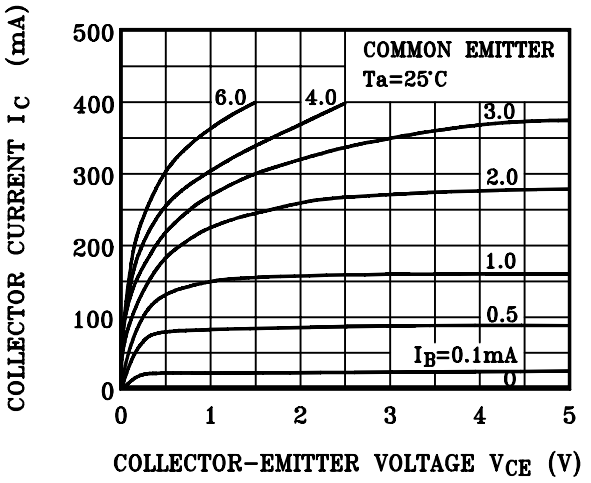


ELECTRICAL CHARACTERISTICS (Ta=25℃)

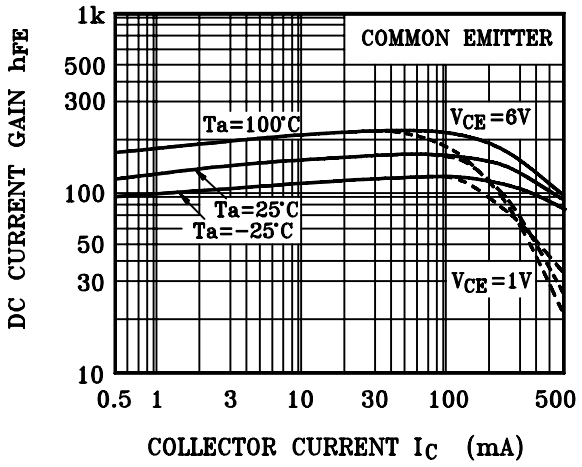
CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	V_{CE}=35V, I_E=0	−	−	0.1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0	−	−	0.1	μA
DC Current Gain (Note)	$h_{FE}(1)$	V_{CE}=1V, I_C=100mA	70	−	240	
	$h_{FE}(2)$	V_{CE}=6V, I_C=400mA	25	−	−	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=100mA, I_B=10mA	−	−	0.1	V
Base-Emitter Voltage	V_{BE}	V_{CE}=1V, I_C=100mA	−	0.8	1.0	V
Transition Frequency	f_T	V_{CE}=6V, I_C=20mA	−	300	−	MHz
Collector Output Capacitance	C_{ob}	V_{CB}=6V, I_E=0, f=1MHz	−	7.0	−	pF

Note : $h_{FE}(1)$ Classification O:70∼140, Y:120∼240
$h_{FE}(2)$ Classification O:25Min., Y:40Min.

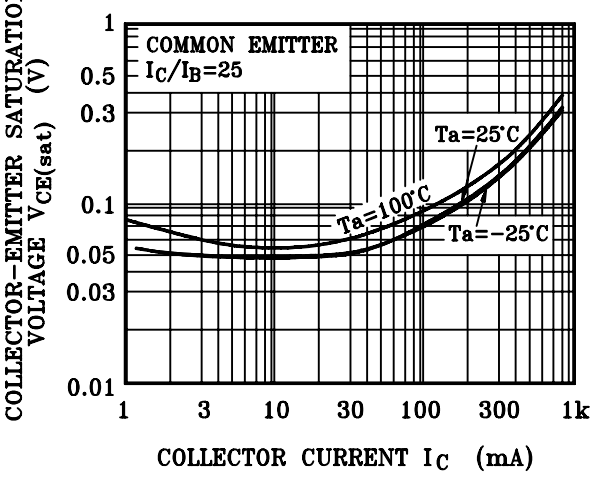
$I_C - V_{CE}$ (LOW VOLTAGE REGION)



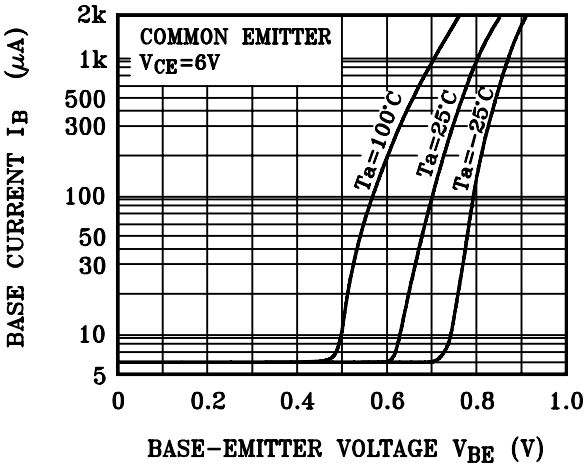
h_{FE} - I_C



$V_{CE(sat)}$ - I_C



I_B - V_{BE}



P_C - Ta