



Plastic-Encapsulate Transistors

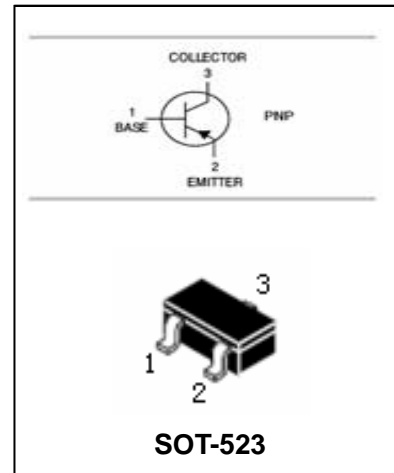
2SA1832

FEATURES

- High voltage and high current
- Excellent h_{FE} linearity
- High h_{FE}
- Complementary to 2sc4738
- Small package



Lead-free



ORDERING INFORMATION

Type No.	Marking	Package Code
2SA1832	SO/SY/SG	SOT-523

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Limits	Unit
V_{CBO}	collector-base voltage	-50	V
V_{CEO}	collector-emitter voltage	-50	V
V_{EBO}	emitter-base voltage	-5	V
I_C	collector current	-150	mA
I_B	Base current	-30	mA
P_C	Collector power dissipation	100	mW
T_{stg}	storage temperature range	-55 to +125	$^\circ\text{C}$
T_j	junction temperature	125	$^\circ\text{C}$

**Plastic-Encapsulate Transistors****2SA1832****ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN.	Typ.	MAX.	UNIT
$V_{(BR)CBO}$	Collector-base breakown voltage	$I_C=-100\mu A, I_E=0$	-50			
$V_{(BR)CEO}$	Collector- emitter breakown voltage	$I_C=-1\mu A, I_B=0$	-50			
$V_{(BR)BEO}$	Emitter-base breakown voltage	$I_E=-100\mu A, I_C=0$	-5			
I_{CBO}	Collector cut-off current	$I_E=0, V_{CB}=-50V$			-0.1	μA
I_{EBO}	Emitter cut-off current	$I_C=0, V_{EB}=-5V$			-0.1	μA
$h_{FE(1)}$	DC current gain	$V_{CE}=-6V, I_C=-2mA$	70		400	
$V_{CE(sat)}$	collector-emitter saturation voltage	$I_C=-100mA, I_B=-10mA$		-0.1	-0.3	V
C_{obo}	Output capacitance	$I_E=0, V_{CB}=-10V, f=1MHz$		4	7	pF
f_T	transition frequency	$I_C=-1mA, V_{CE}=-10V,$	80			MHz

CLASSIFICATION OF $h_{FE(1)}$

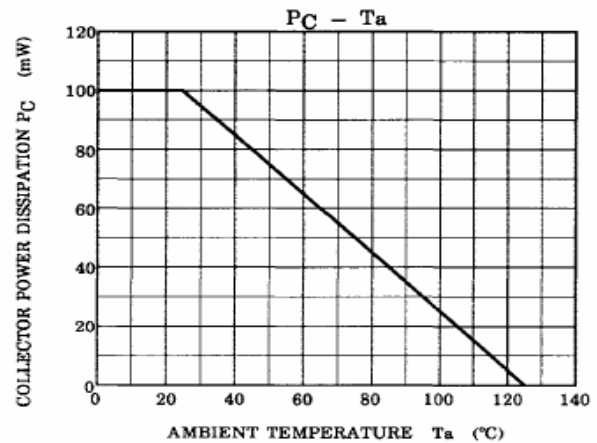
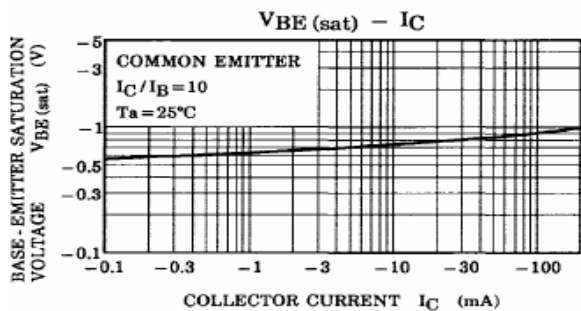
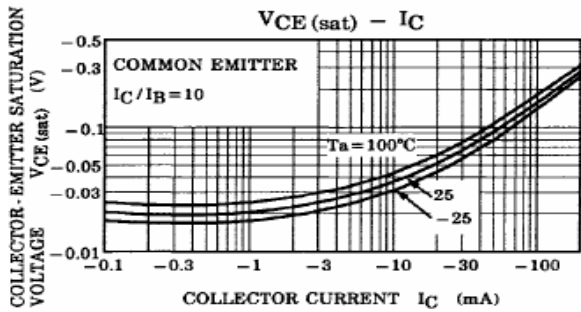
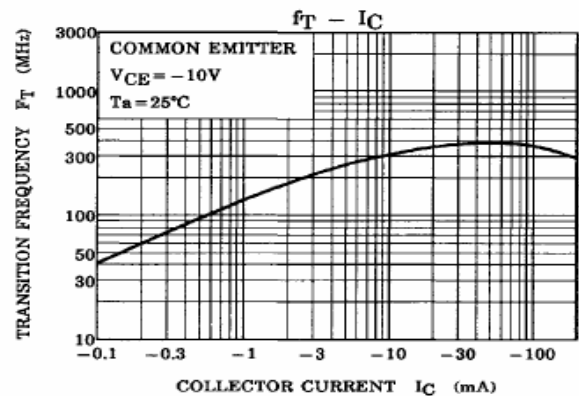
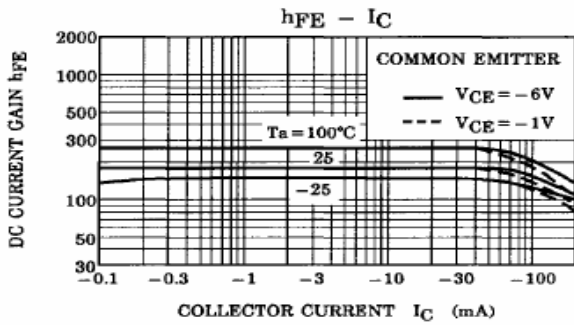
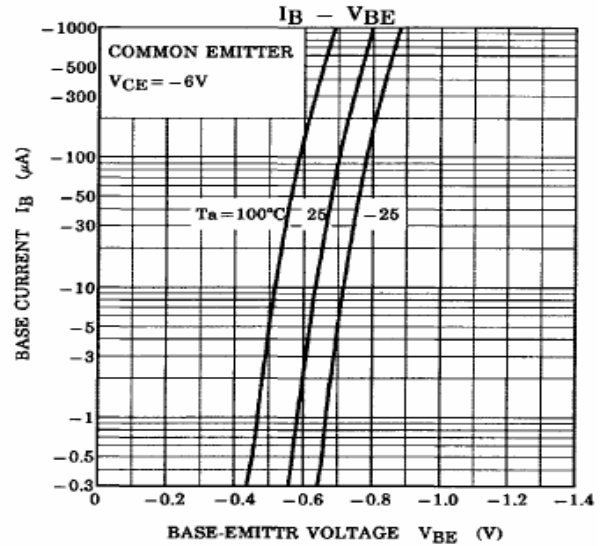
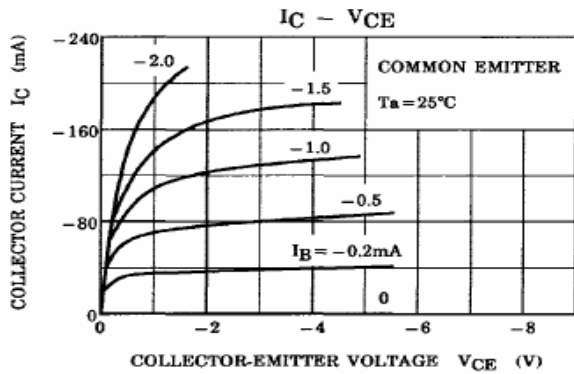
Rang	70-140	120-240	200-400
Marking	SO	SY	SG



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TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified





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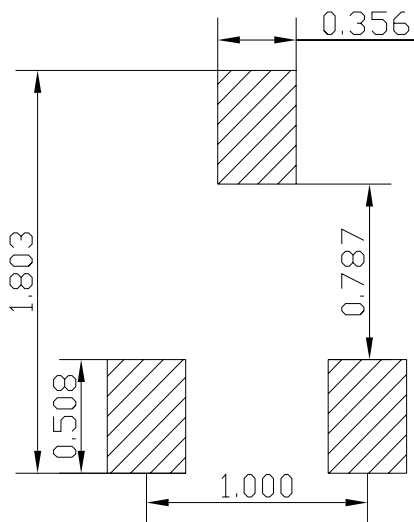
PACKAGE OUTLINE

Plastic surface mounted package

SOT-523

SOT-523		
Dim	Min	Max
A	1.5	1.7
B	0.75	0.85
C	0.6	0.8
D	0.15	0.3
G	0.9	1.1
H	0.02	0.1
J	0.1 Typical	
K	1.45	1.75
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
2SA1832	SOT-523	3000/Tape&Reel