



**SOT-23 Plastic-Encapsulate Transistors**

**2SA1585** TRANSISTOR (PNP)

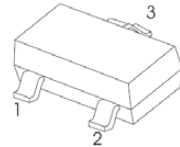
**FEATURES**

- LOW  $V_{CE(sat)}$
- Excellent DC current gain characteristics. Power dissipation

**MAXIMUM RATINGS\*  $T_A=25^{\circ}C$  unless otherwise noted**

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-20	V
$V_{CEO}$	Collector-Emitter Voltage	-20	V
$V_{EBO}$	Emitter-Base Voltage	-6	V
$I_C$	Collector Current -Continuous	-2	A
$P_C$	Collector Power Dissipation	350	mW
$T_j$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature Range	-55-150	$^{\circ}C$

**SOT-23**



1. BASE
2. EMITTER
3. COLLECTOR

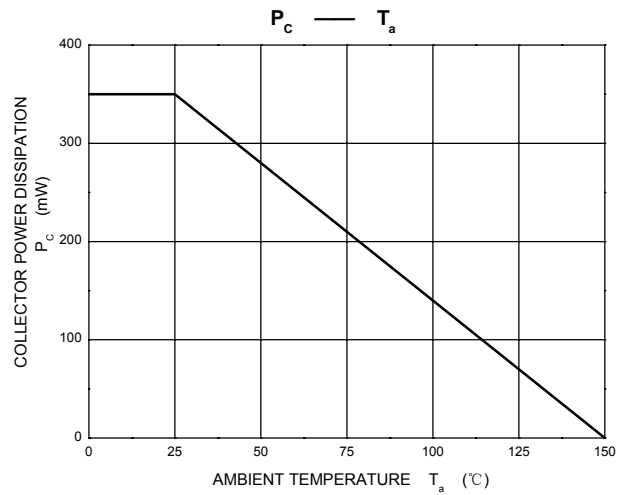
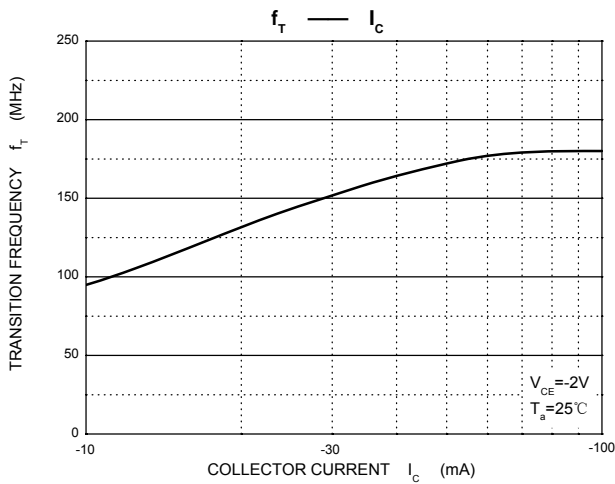
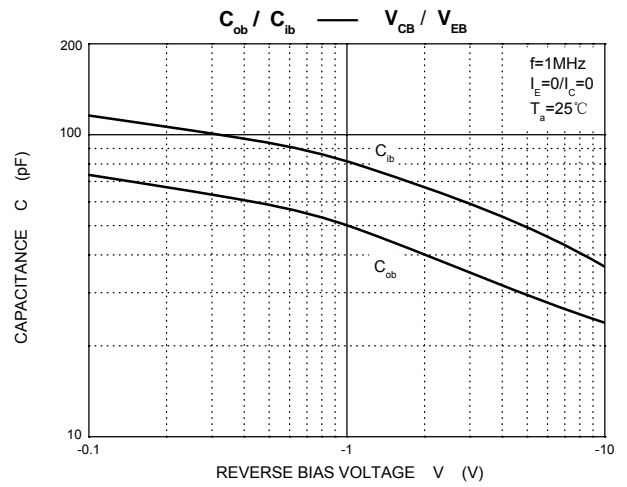
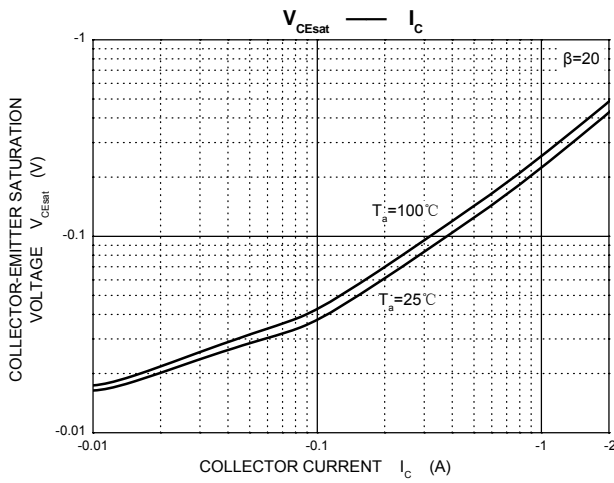
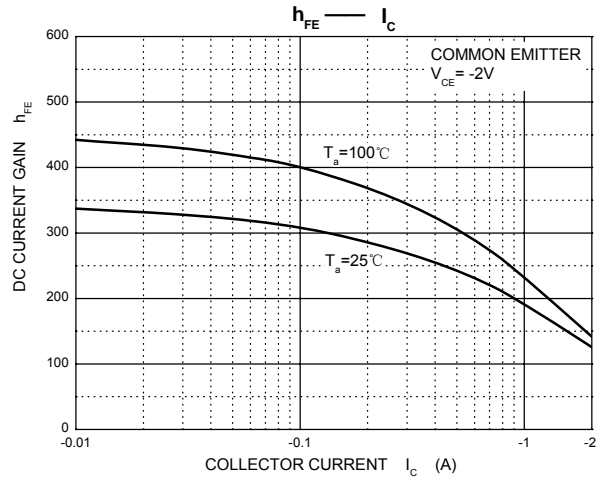
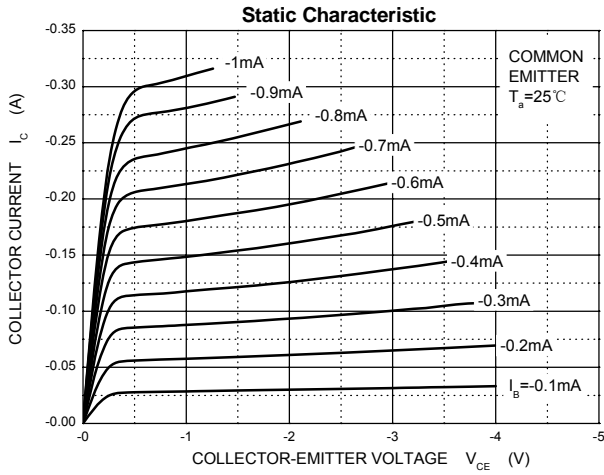
**ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}C$  unless otherwise specified)**

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -50\mu A, I_E = 0$	-20			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1 mA, I_B = 0$	-20			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -50\mu A, I_C = 0$	-6			V
Collector cut-off current	$I_{CBO}$	$V_{CB} = -20V, I_E = 0$			-0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$			-0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = -2V, I_C = -0.1A$	120		390	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -2A, I_B = -0.1A$			-0.5	V
Transition frequency	$f_T$	$V_{CE} = -2V, I_C = -0.5A, f = 100MHz$		240		MHz

**CLASSIFICATION OF  $h_{FE}$**

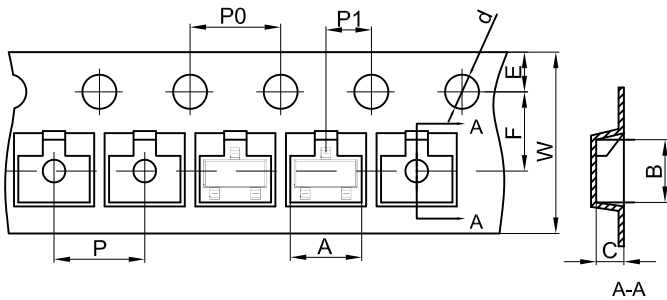
Rank	Q	R
Range	120-270	180-390
Marking	AEQ AE	R

# Typical Characteristics





## SOT-23 Embossed Carrier Tape



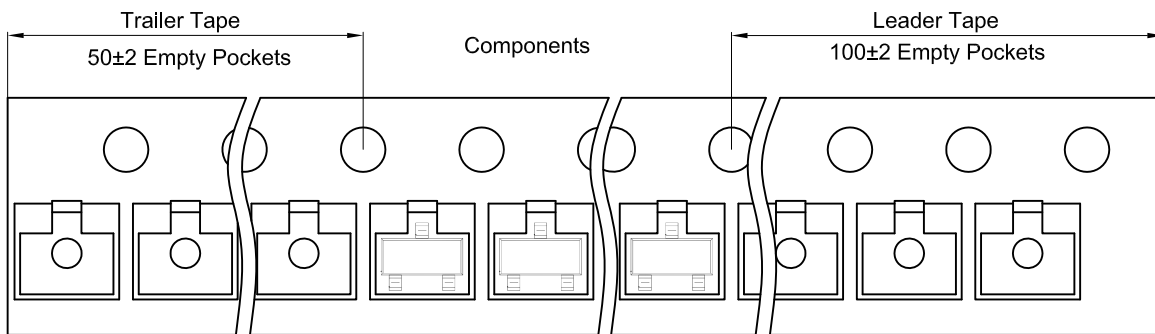
### Packaging Description:

SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

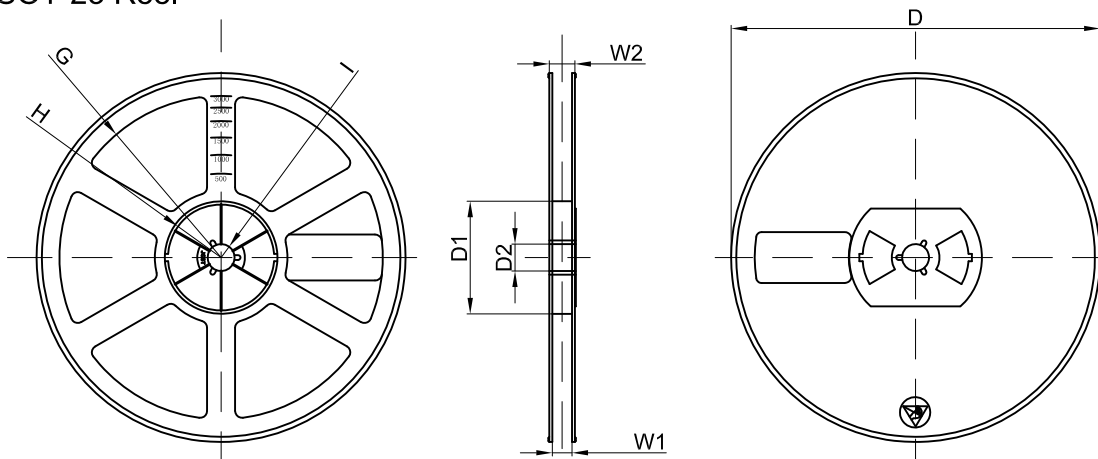
Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

## SOT-23 Tape Leader and Trailer



## SOT-23 Reel



Dimensions are in millimeter

Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	