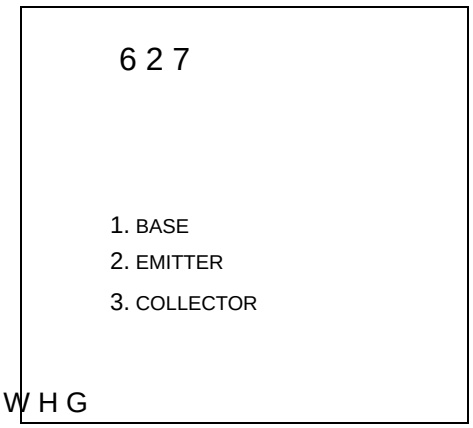
6 2 7

0 0 % 7 TRANSISTOR (PNP)



) ($ 7 8 5 (6

Switching transistor

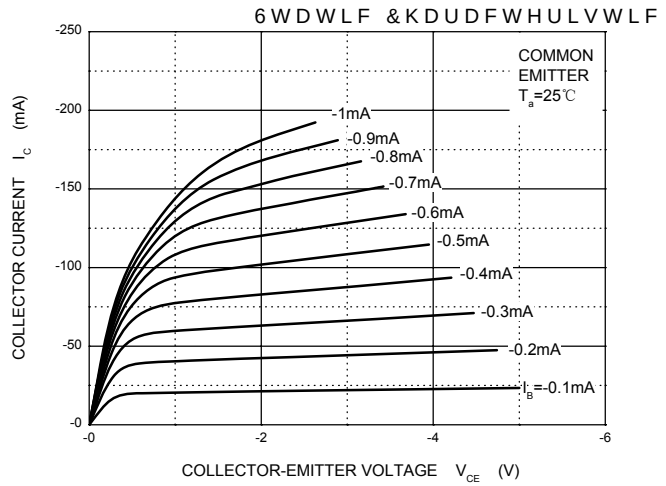
0 $ 5 . , 1 * Ö 7

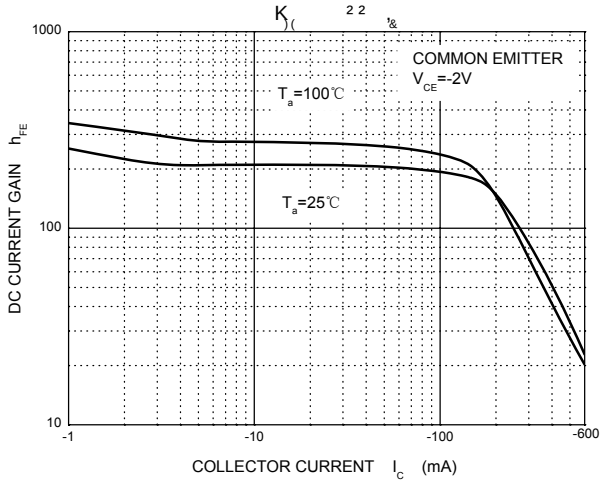
0 $; , 0 8 0 5 $ 7 , 1 * 6 D 7 / X Q O H V V R W K H U Z L V H Q R W H G

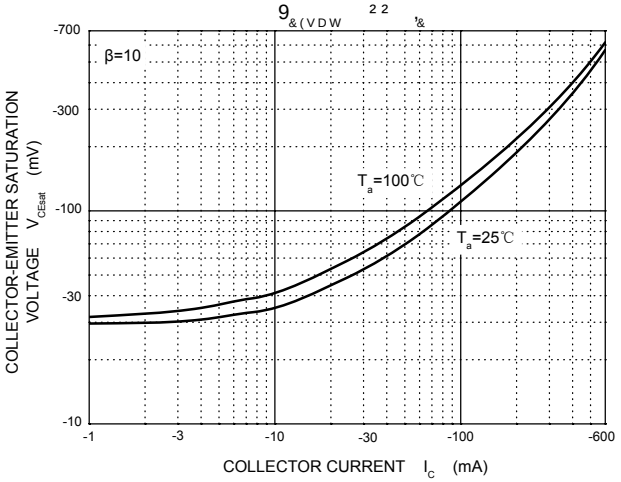
6 \ P E R O	3 D U D P H W H U	9 D O X H	8 Q L W
$9&%2$	&RO OHFWRU %DVH 9RROWDJH		9
$9&(2$	&RO OHFWRU (PLWWHU 9RROWDJH		9
$9(%2$	(PLWWHU %DVH 9RROWDJH		9
$,&$	&RO OHFWRU &XUUHQW		P $
$3&$	&RO OHFWRU 3RZHU 'LVVLSDWLRQ		P :
$5,-$$	7KHUPDO 5HVLVWDQFH)URP -XQFWLRQ 7R $PELHQW		
$7M$	-XQFWLRQ 7HPSHUDWXUH		/
$7VWJ$	6WRUDJH 7HPSHUDWXUH		/

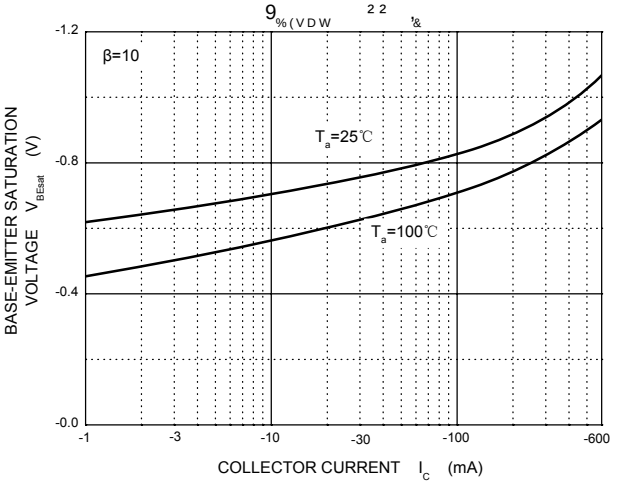
(/ (& 7 5 , & $ & + $ 5 $ & 7 (5 , 6 7 , & 6 7 X Q O H V V R W K H U Z L V H S H F L I L H G

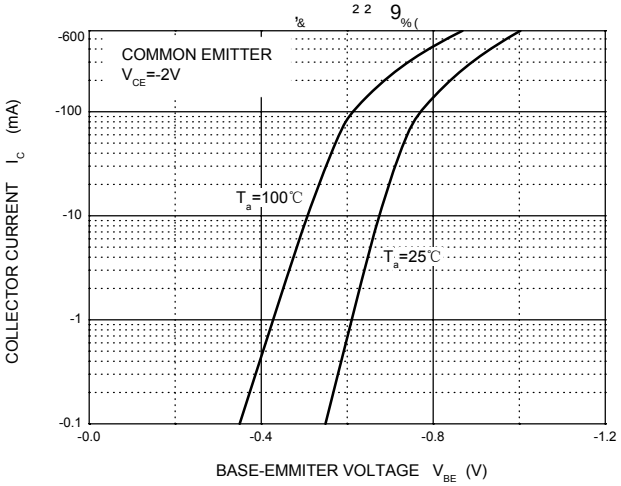
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100 - A,I_E=0	-40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,I_B=0	-40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100 - A ,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-35V,I_E=0			-0.1	- A
Emitter cut-off current	I_{EBO}	V_{EB}=-4V,I_C=0			-0.1	- A
DC current gain	h_{FE1}	V_{CE}=-1V, I_C=-0.1mA	0			
	h_{FE2}	V_{CE}=-1V, I_C=-1mA	0			
	h_{FE3}	V_{CE}=-1V, I_C=-10mA	0			
	h_{FE4}	V_{CE}=-2V, I_C=-150mA	100		300	
	h_{FE5}	V_{CE}=-2V, I_C=-500mA	0			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-150mA,I_B=-15mA			-0.4	V
		I_C=-500mA,I_B=-50mA			-0.75	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-150mA,I_B=-15mA			-0.95	V
		I_C=-500mA,I_B=-50mA			-1.3	V
Transition frequency	f_T	V_{CE}=-10V, I_C=-20mA,f =100MHz	200			MHz
Delay time	t_d	V_{CC}=-30V, $V_{BE(off)}$=-0.5V			15	ns
Rise time	t_r	I_C=-150mA , I_{B1}=-15mA			20	ns
Storage time	t_s	V_{CC}=-30V, I_C=-150mA			225	ns
Fall time	t_f	I_{B1}=I_{B2}=-15mA			0	ns

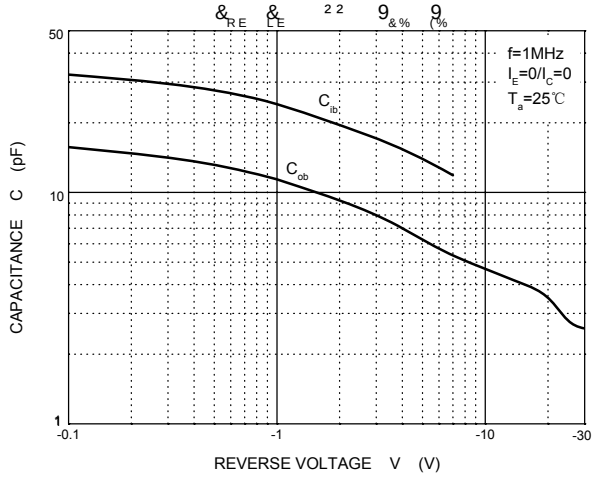

COMMON
EMITTER
T_a=25℃
-1mA
-0.9mA
-0.8mA
-0.7mA
-0.6mA
-0.5mA
-0.4mA
-0.3mA
-0.2mA
I_B=-0.1mA
COLLECTOR CURRENT I_C (mA)
COLLECTOR-EMITTER VOLTAGE V_{CE} (V)

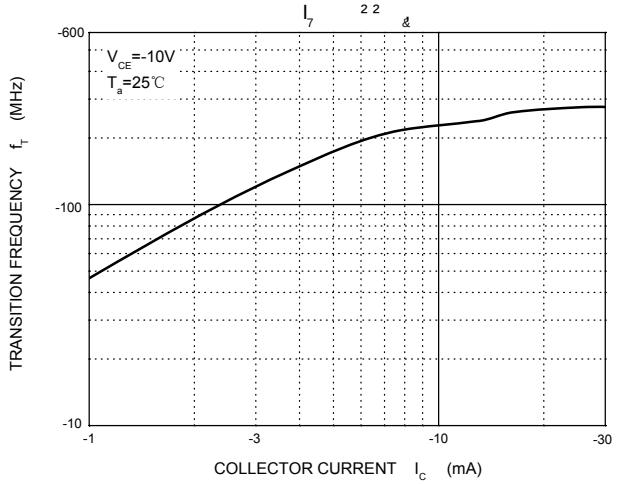

COMMON EMITTER
V_{CE}=-2V
T_a=100℃
T_a=25℃
DC CURRENT GAIN h_{FE}
COLLECTOR CURRENT I_C (mA)

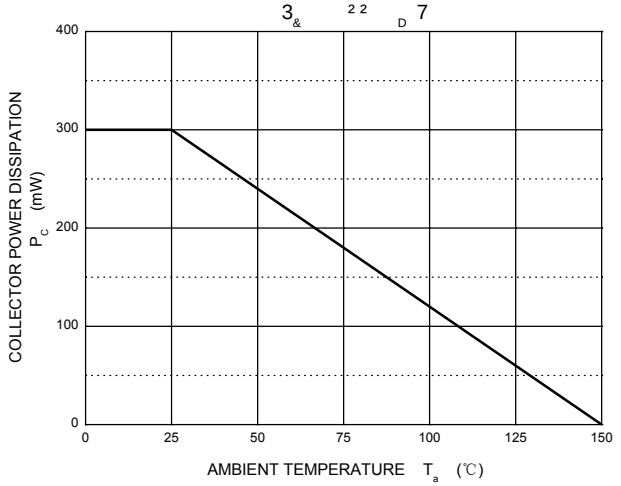

β=10
T_a=100℃
T_a=25℃
COLLECTOR-EMITTER SATURATION VOLTAGE V_{CEsat} (mV)
COLLECTOR CURRENT I_C (mA)

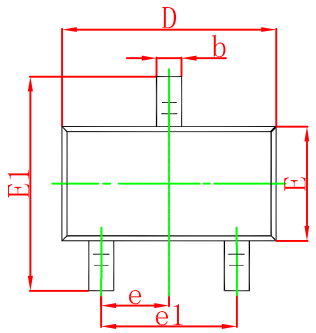

β=10
T_a=25℃
T_a=100℃
BASE-EMITTER SATURATION VOLTAGE V_{BEsat} (V)
COLLECTOR CURRENT I_C (mA)

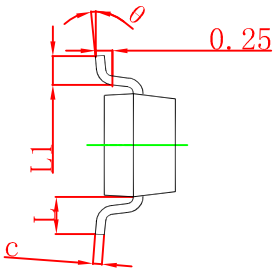

COMMON EMITTER
V_{CE}=-2V
T_a=100℃
T_a=25℃
COLLECTOR CURRENT I_C (mA)
BASE-EMMITER VOLTAGE V_{BE} (V)

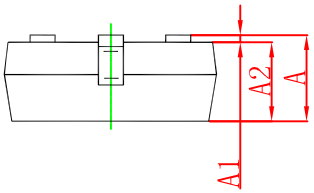

f=1MHz
I_E=0/I_C=0
T_a=25℃
C_{ib}
C_{ob}
CAPACITANCE C (pF)
REVERSE VOLTAGE V (V)


V_{CE}=-10V
T_a=25℃
TRANSITION FREQUENCY f_T (MHz)
COLLECTOR CURRENT I_C (mA)


COLLECTOR POWER DISSIPATION P_C (mW)
AMBIENT TEMPERATURE T_a (℃)

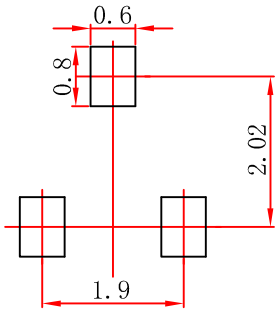






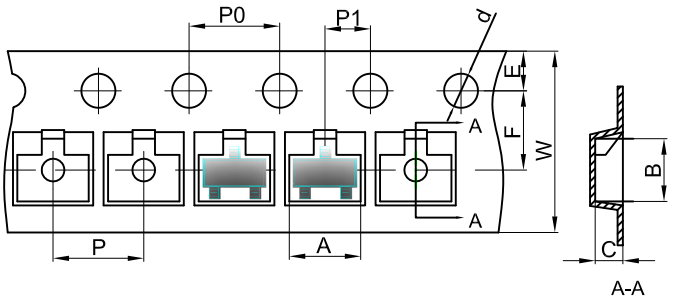
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

SOT-23 Embossed Carrier Tape

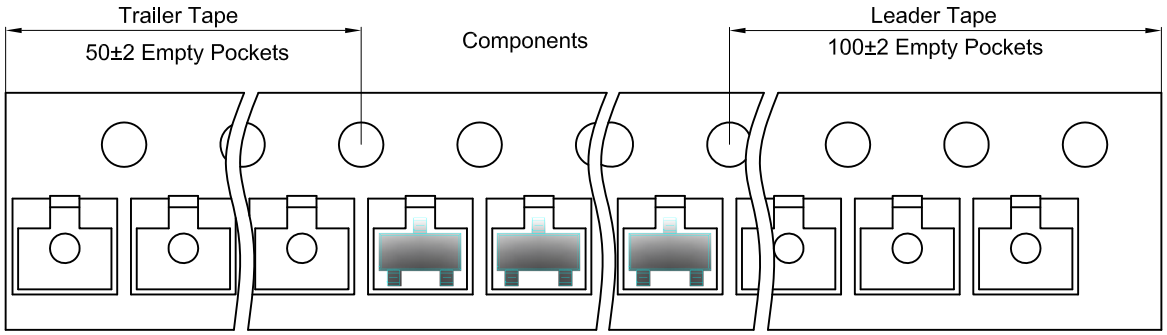


Packaging Description:

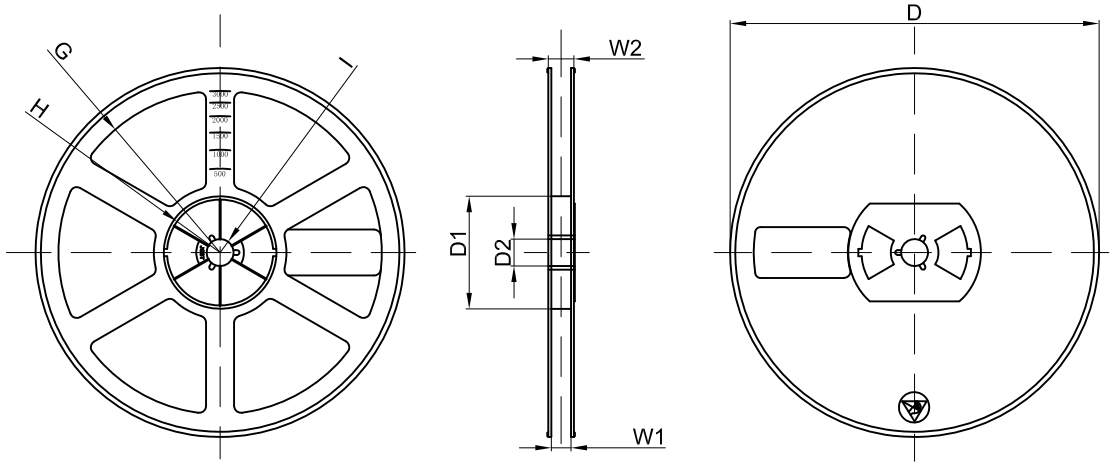
SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in 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	