Lastinght

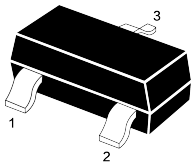
MMBTSC2714

NPN Silicon Epitaxial Planar Transistor

for high frequency amplifier at FM,RF,MIX, and IF amplifier applications.

The transistor is subdivided into three groups, R, O and Y, according to its DC current gain.

SOT-23



1. BASE
2. EMITTER
3. COLLECTOR

RoHS COMPLIANT

Pb-Free

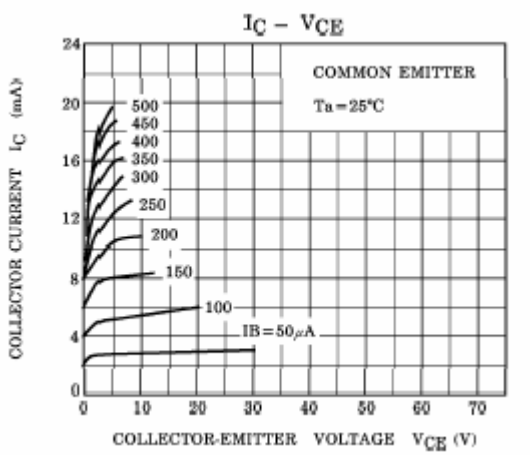
Absolute Maximum Ratings (T_a = 25 °C)

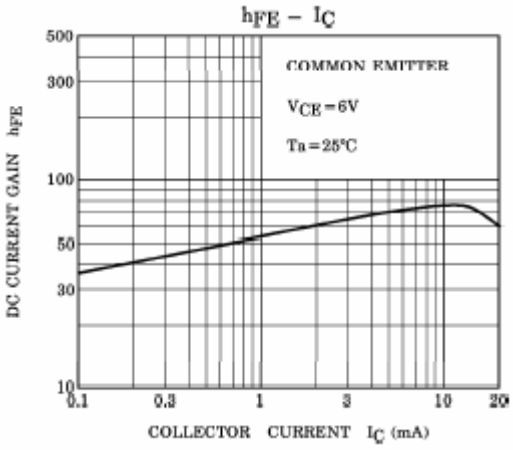
Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	40	V
Collector Emitter Voltage	V_{CEO}	30	V
Emitter Base Voltage	V_{EBO}	4	V
Collector Current	I_C	20	mA
Base Current	I_B	4	mA
Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_S	-55 to +125	°C

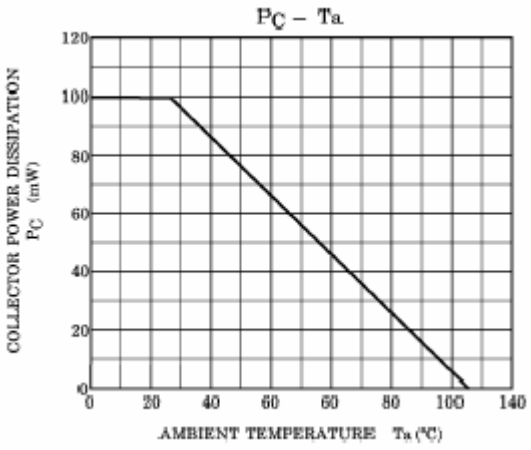
Characteristics at T_{amb}=25 °C

Parameter	Symbol	Min.	Typ.	Max.	Unit
DC Current Gain					
at V_{CE}=6V, I_C=1mA					
Current Gain Group R	h_{FE}	40	-	80	-
O	h_{FE}	70	-	140	-
Y	h_{FE}	100	-	200	-
Collector Cutoff Current					
at V_{CB}=18V	I_{CBO}	-	-	0.5	μA
Emitter Cutoff Current					
at V_{EB}=4V	I_{EBO}	-	-	0.5	μA
Transition Frequency					
at V_{CE}=6V, I_C=1mA	f_T	-	550	-	MHz
Reverse Transfer Capacitance					
at V_{CB}=6V, f=1MHz	C_{re}	-	0.7	-	pF
Collector-Base Time Constant	C_c.rbb'	-	-	30	ps
Noise Figure					
at V_{CE}=6V, I_E=-1mA, f=100MHz	NF	-	2.5	5	dB
Power Gain					
at V_{CE}=6V, I_E=-1mA, f=100MHz	G_{pe}	17	23	-	dB

Typical Characteristics

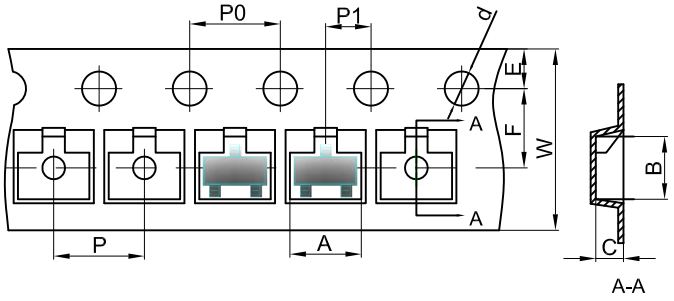






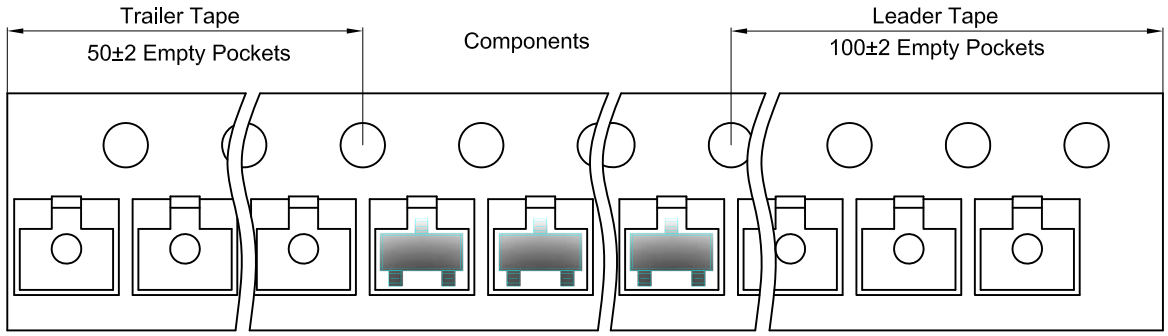
SOT-23 Tape and Reel

SOT-23 Embossed Carrier Tape

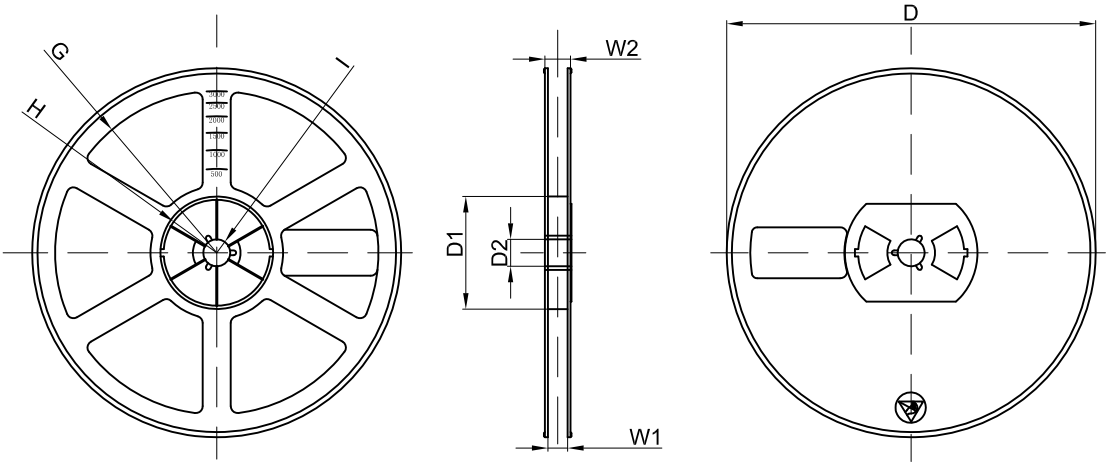


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-23 Tape Leader and Trailer

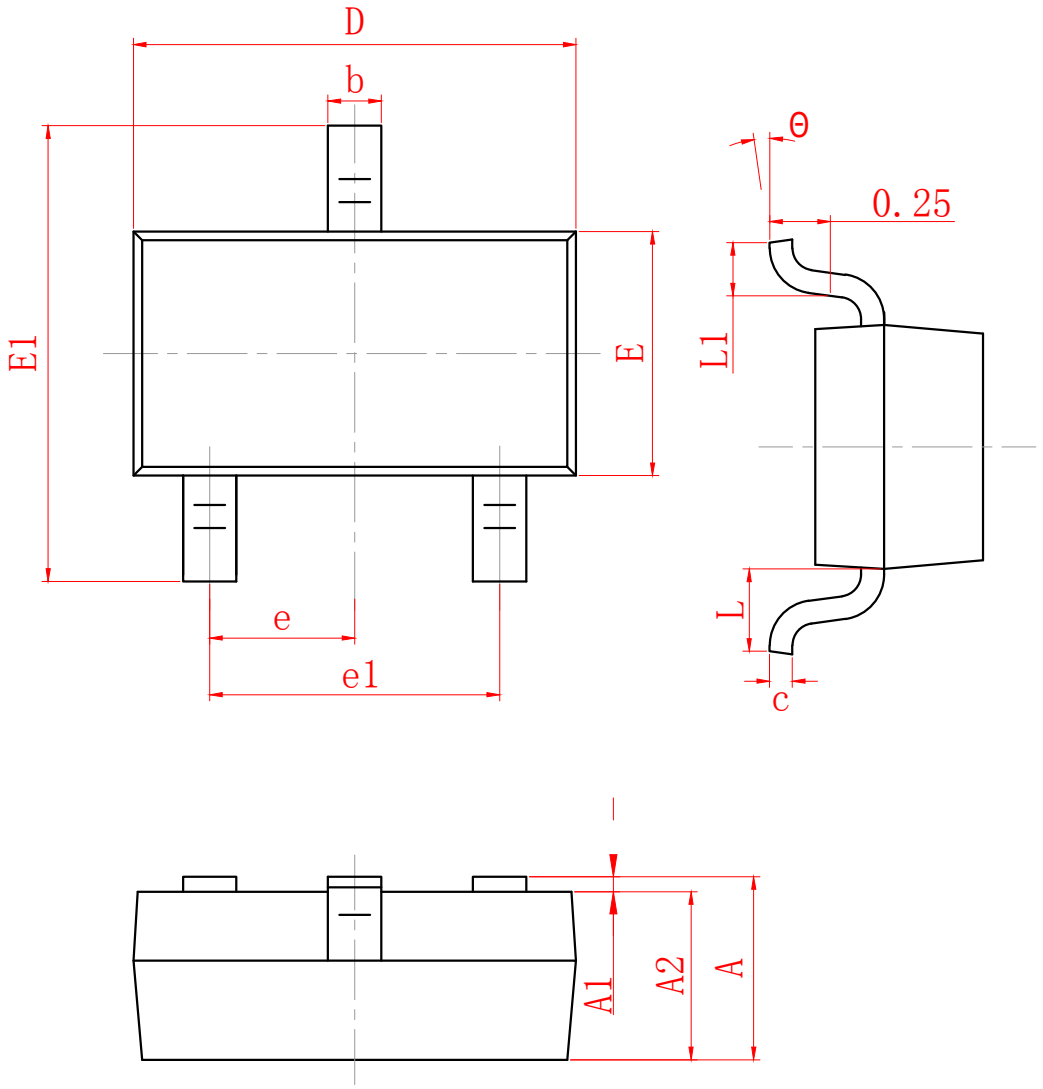


SOT-23 Reel



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	



SYMBOL	MILLIMETER	
	MIN	MAX
A	0.900	1.150
A1	0.000	0.100
A2	0.900	1.050
b	0.300	0.500
c	0.080	0.150
D	2.800	3.000
E	1.200	1.400
E1	2.250	2.550
e	0.950 TYP	
e1	1.800	2.000
L	0.550 REF	
L1	0.300	0.500
θ	0°	8°

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