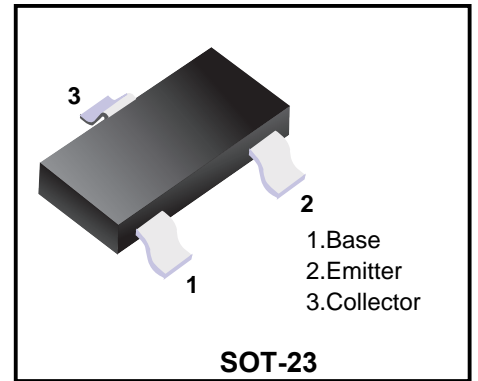


Low Frequency Transistor



Features

- Low $V_{CE(sat)}$, $V_{CE(sat)} \leq -0.5V$ ($I_c / I_B = -0.5A / -50mA$) .
- $I_c = -0.8A$.
- PNP silicon transistor

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Collector-base Voltage	V_{CBO}	-40	V
Collector-emitter Voltage	V_{CEO}	-32	V
Emitter-base Voltage	V_{EBO}	-5	V
Collector current	I_c	-0.8	A
Collector power dissipation	P_c	0.2	W
Jumction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics (Ta=25°C unless otherwise specified.)

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltae	V_{CBO}	$I_c = -50 \mu A$	-40			V
Collector-emitter breakdown voltage	V_{CEO}	$I_c = -1mA$	-32			V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -50 \mu A$	-5			V
Collector cutoff current	I_{CBO}	$V_{CB} = -20V$			-0.5	μA
Emitter cutoff current	I_{EBO}	$V_{EB} = -4V$			-0.5	μA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_c = -0.5A, I_B = -50mA$			-0.5	V
DC current transfer ratio	hFE	$V_{CE} = -3V, I_c = -100mA$	120		390	
Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0A, f = 1MHz$		12	30	pF
Transition frequency	f_T	$V_{CE} = -5V, I_E = 50mA, f = 100MHz$		200		MHz

hFE Classification

Marking	AHQ	AHR
Rank	Q	R
hFE	120~270	180~390

Ordering information

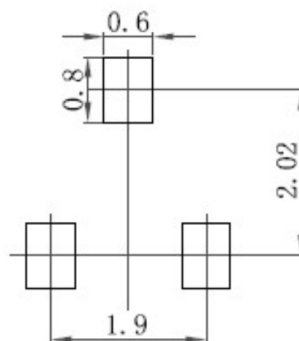
Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel,7"reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

Package Dimensions

SOT-23

Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
E	1.9		75	
E1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



Disclaimer

The information presented in this document is for reference only. GuangDong Youfeng Microelectronics Co.,Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise. The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), YFW or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale. This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <https://www.yfwdiode.com>, or consult YFW sales office for further assistance.