HFZT

2SD2142

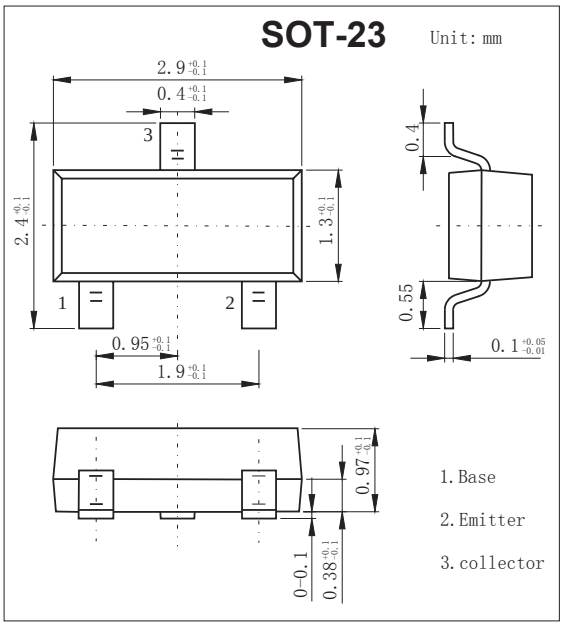
SOT-23 Plastic-Encapsulate Transistors

FEATURES

- Darlington connection for a high H_{fe}
- High input impedance
- General purpose amplifiers.

MECHANICAL DATA

- Case style:SOT-23molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	32	V
V_{EBO}	Emitter-Base Voltage	12	V
I_C	Collector Current -Continuous	300	mA
P_C	Collector Dissipation	200	mW
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	℃

PACKAGE INFORMATION

Device	Package	Shipping
2SD2142	SOD-23	3000/Tape&Reel

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	40	-	-	V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA,I_B=0	32	-	-	V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	12	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}=30V,I_E=0	-	-	0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=12V,I_C=0	-	-	0.1	μA
DC current gain	h_{FE}	V_{CE}=3V,I_C=100mA		-	-	-
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=200mA, I_B= 0.2mA	-	-	1.4	V
Output capacitance	C_{ob}	V_{CB}=10V,I_E=0,f=1MHz	-	2.		pF
Transition frequency	f_T	V_{CE}=5V, I_C= 10mA f=100MHz	-	20		MHz

■ hFE Classification

Marking	R1M

RATINGS AND CHARACTERISTIC CURVES

■ Typical Characterisitics