SHENZHEN HAOCHANG SEMICONDUCTOR CO.,LTD.

SOT-23 Plastic-Encapsulate Transistors

A733 TRANSISTOR (PNP)

SOT-23

1. BASE
2. EMITTER
3. COLLECTOR

FEATURE

- Collector-Base Voltage
- Complement to C945

MAXIMUM RATINGS(T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-150	mA
P_C	Collector Power Dissipation	200	mW
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V(BR)_{CBO}$	I_C= -5uA,I_E=0	-60			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	I_C= -1mA , I_B=0	-50			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	I_E= -50uA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}= -60 V , I_E=0			-0.1	uA
Emitter cut-off current	I_{EBO}	V_{EB}= -5 V , I_C=0			-0.1	uA
DC current gain	h_{FE}	V_{CE}= -6 V, I_C= -1mA	120		475	
Collector-emitter saturation voltage	V_{CE}(sat)	I_C= -100mA, I_B=- 10mA		-0.18	-0.3	V
Base-emitter voltage	$V_{BE(on)}$	V_{CE}=-6V,I_C=-1.0mA	-0.58	-0.62	-0.68	V
Transition frequency	f_T	V_{CE}=-6V,I_C=-10mA	50			MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=1MHz		4.5	7	pF
Noise figure	NF	V_{CE}=-6V,I_C=-0.3mA, Rg=10kΩ,f=100Hz		6	20	dB

CLASSIFICATION OF h_{FE}

Rank	**L**	**H**
Range	120-220	220-475
MARKING	**CS**	