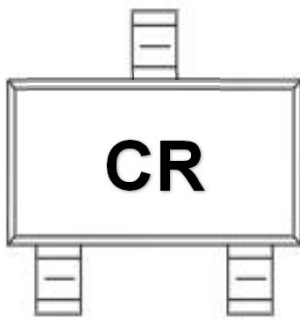




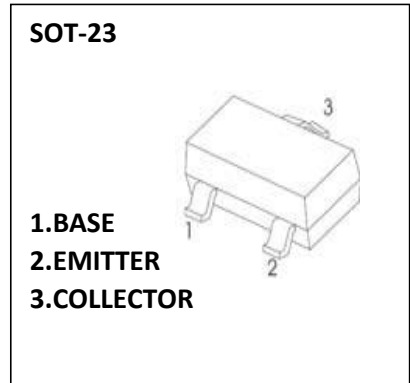
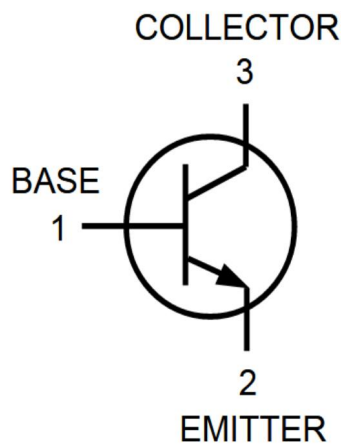
SHENZHEN MENGKE ELECTRONICS TECHNOLOGY CO.,LTD
SOT-23 Plastic-Encapsulate Transistors

2SC945 **TRANSISTOR (NPN)**

MARKING:



Equivalent Circuit :



FEATURES:

- ※ Complimentary to 2SA733
- ※ Excellent HFE Linearity
- ※ LOW noise

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	VCBO	60	V
Collector-Emitter Voltage	VCEO	50	V
Emitter-Base Voltage	VEBO	5	V
Collector Current	IC	150	mA
Collector Power Dissipation	PC	200	mW
Thermal Resistance From Junction To Ambient	RθJA	417	°C/W
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55~+150	°C



ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR)CBO	IC= 100μA, IE=0	60			V
Collector-emitter breakdown voltage	V(BR)CEO	IC= 1mA, IB=0	50			V
Emitter-base breakdown voltage	V(BR)EBO	IE=100μA, IC=0	5			V
Collector cut-off current	ICBO	VCB=60 V , IE=0			0.1	μA
Collector cut-off current	ICER	VCB=55V , R=10MΩ			0.1	μA
Emitter cut-off current	IEBO	VEB= 5V , IC=0			0.1	μA
DC current gain	hFE	VCE=6V, IC= 1mA	130		400	
	hFE	VCE=6V, IC= 0.1mA	40			
Collector-emitter saturation voltage	VCE(sat)	IC=100 mA, IB= 10mA			0.3	V
Base-emitter saturation voltage	VBE(sat)	IC=100 mA, IB= 10mA			1	V
Transition frequency	fT	VCE=6V, IC= 10mA f=30MHz	150			MHz
Collector Output Capacitance	Cob	VCE=10V, IE= 0 f=1MHz			3.0	pf
Noise Figure	NF	VCE=6V, IC= 0.1mA Rg=10kΩ; f=1MHz		4	10	dB

CLASSIFICATION OF hFE

Rank	L	H	
Range	130-200	200-400	



TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS

