

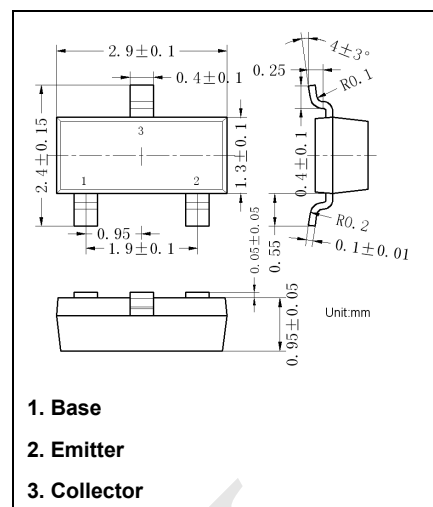
SOT-23 Plastic-Encapsulate Transistors

C945 NPN Transistors

Features

- Excellent h_{FE} Linearity
- Low noise
- Complementary to A733

Marking: CR



Maximum Ratings ($T_a=25^\circ\text{C}$ unless otherwise noted)

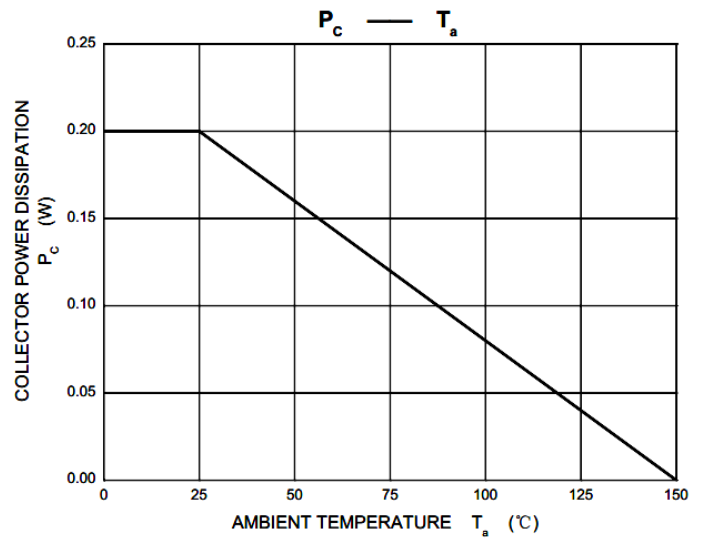
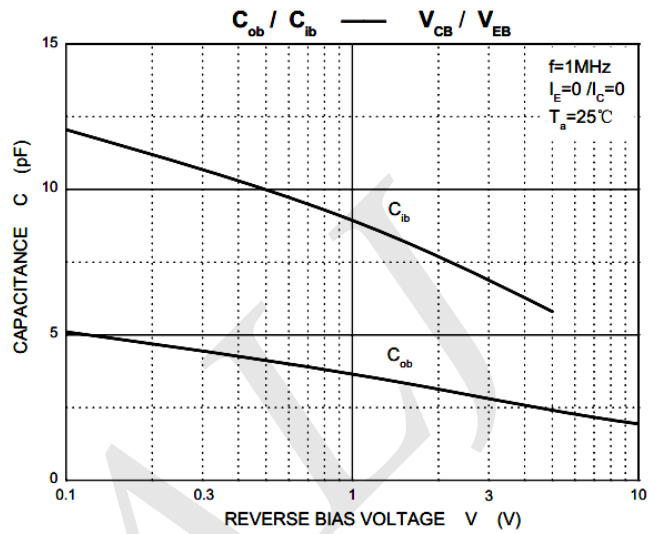
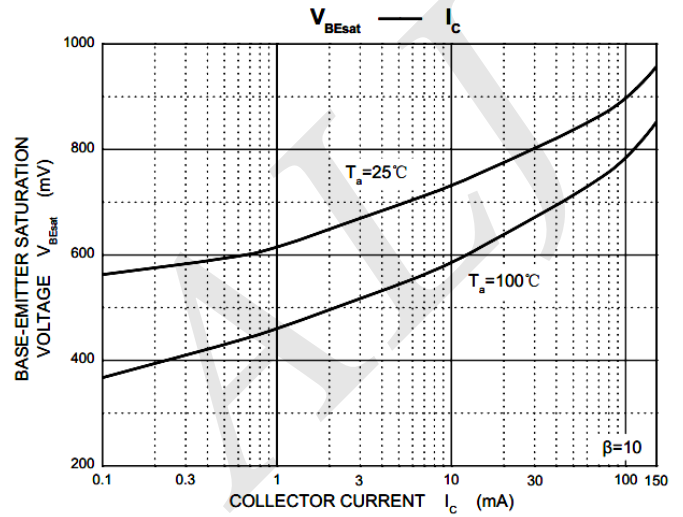
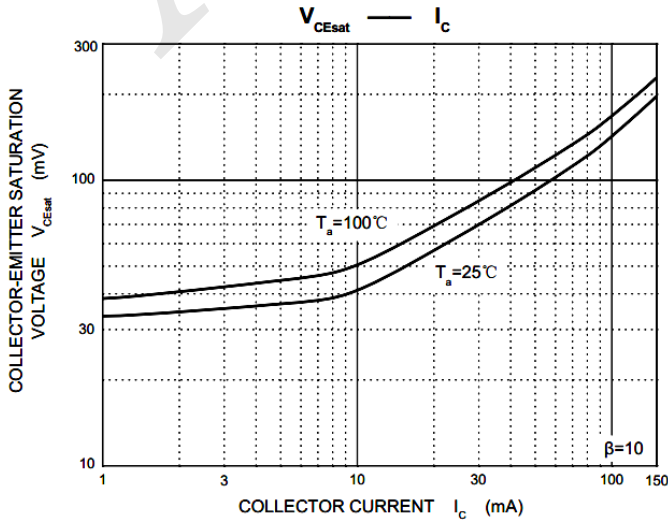
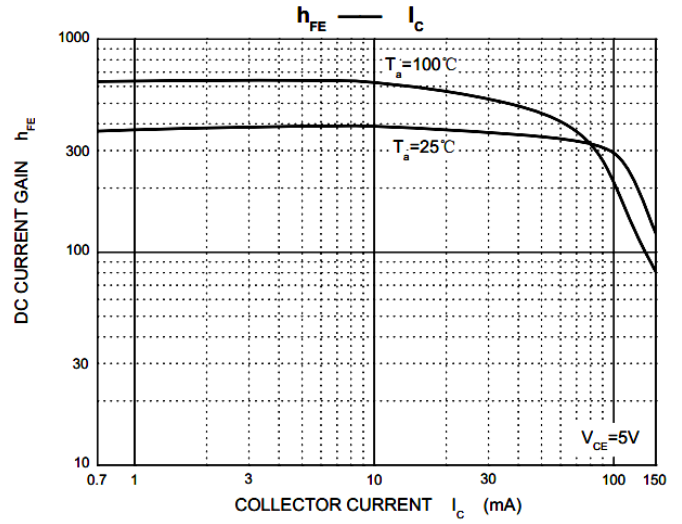
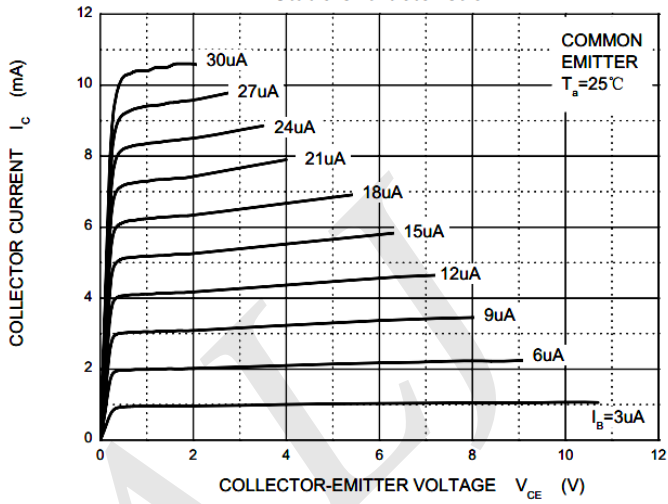
Symbol	Parameter	Value	Unit
V_{CB0}	Collector Base Voltage	60	V
V_{CEO}	Collector Emitter Voltage	50	V
V_{EBO}	Emitter Base Voltage	5	V
I_c	Collector Current	150	mA
P_c	Collector Power Dissipation	200	mW
T_j	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55 ~ +150	$^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	625	$^\circ\text{C/W}$

Electrical Characteristics ($T_a=25^\circ\text{C}$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
$V_{(BR)CB0}$	Collector-base breakdown voltage	$I_c = 100\mu\text{A}, I_E = 0$	60			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_c = 1\text{mA}, I_B = 0$	50			
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = 100\mu\text{A}, I_C = 0$	5			
I_{CBO}	Collector cut-off current	$V_{CB} = 60\text{V}, I_E = 0$			100	nA
I_{CER}	Collector cut-off current	$V_{CE} = 55\text{V}, R = 10\text{M}\Omega$			100	
I_{EBO}	Emitter cut-off current	$V_{EB} = 5\text{V}, I_C = 0$			100	
$h_{FE(1)}$	DC current gain	$V_{CE} = 5\text{V}, I_c = 1\text{mA}$	130			
$h_{FE(2)}$		$V_{CE} = 6\text{V}, I_c = 1\text{mA}$	300		400	
$h_{FE(3)}$		$V_{CE} = 6\text{V}, I_c = 0.1\text{mA}$	40			
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_c = 100\text{mA}, I_B = 10\text{mA}$			0.3	V
$V_{BE(sat)}$	Base-emitter saturation voltage	$I_c = 100\text{mA}, I_B = 10\text{mA}$			1	V
f_T	Transition frequency	$V_{CE} = 6\text{V}, I_c = 10\text{mA}, f = 30\text{MHz}$	150			MHz
C_{ob}	Collector output capacitance	$V_{CB} = 10\text{V}, I_E = 0, f = 1\text{MHz}$			3.0	pF
NF	Noise figure	$V_{CE} = 6\text{V}, I_c = 0.1\text{mA}$ $R_g = 10\text{k}\Omega, f = 1\text{kHz}$		4	10	dB

Typical Characteristics

Static Characteristic



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Bipolar Transistors - BJT category](#):

Click to view products by [ALJ manufacturer](#):

Other Similar products are found below :

[BC559C](#) [MCH4017-TL-H](#) [MMBT-2369-TR](#) [BC546/116](#) [NJVMJD148T4G](#) [NTE16](#) [NTE195A](#) [IMX9T110](#) [2N4401-A](#) [2N6728](#) [2SA1419T-TD-H](#) [2SB1204S-TL-E](#) [2SC5488A-TL-H](#) [FMC5AT148](#) [2N2369ADCSM](#) [2N2907A](#) [2N3904-NS](#) [2N5769](#) [2SC4618TLN](#) [CPH6501-TL-E](#) [BC856BW-13-F](#) [US6T6TR](#) [BAX18/A52R](#) [BC556/112](#) [IMZ2AT108](#) [MMST8098T146](#) [MCH6102-TL-E](#) [BC846B-13-F](#) [2N3879](#) [30A02MH-TL-E](#) [NTE13](#) [NTE282](#) [NTE323](#) [NTE350](#) [NTE81](#) [JANTX2N2920L](#) [JANSR2N2907AUB](#) [CMLT3946EG TR](#) [SNSS40600CF8T1G](#) [CMLT3906EG TR](#) [GRP-DATA-JANS2N2907AUB](#) [GRP-DATA-JANS2N2222AUA](#) [MMDT3946FL3-7](#) [2N4240](#) [JANS2N3019](#) [MSB30KH-13](#) [2N2221AUB](#) [2SD1815T-TL-E](#) [2N6678](#) [2N2907Ae4](#)