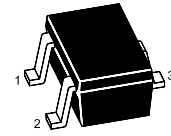


# TRANSISTOR (NPN)

## FEATURE

Excellent  $h_{FE}$  Linearity Low noise  
Complementary to A733W



1.Base 2.Emitter 3.Collector  
SOT-323 Plastic Package

## MARKING: CR

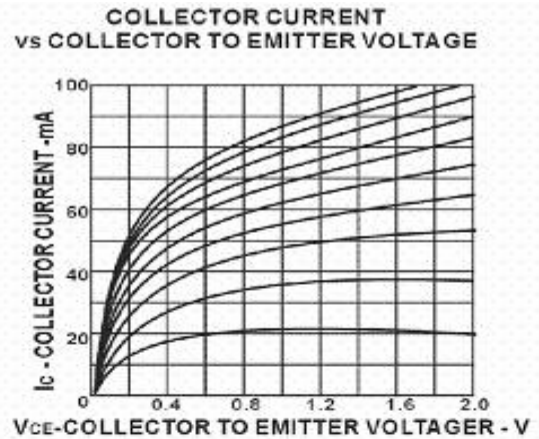
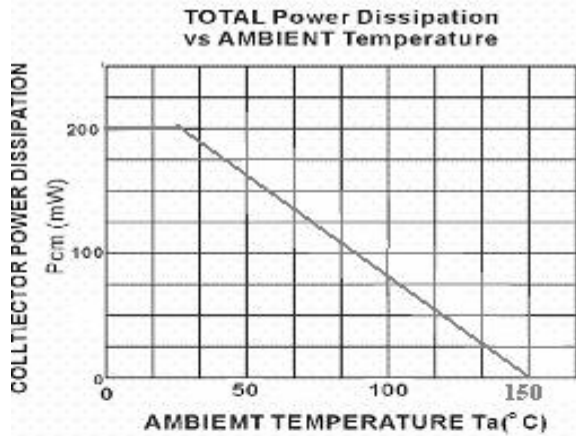
### MAXIMUM RATINGS ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

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	$^{\circ}\text{C}$
$T_{sto}$	Storage Temperature	-55-150	$^{\circ}\text{C}$

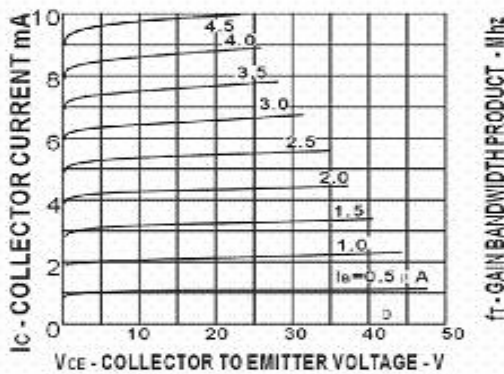
### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V(BR)_{CBO}$	$I_C=100\mu\text{A}$ , $I_E=0$	60			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	$I_C=1\text{mA}$ , $I_B=0$	50			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	$I_E=0.1\text{mA}$ , $I_C=0$	5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=60\text{V}$ , $I_E=0$			0.1	$\mu\text{A}$
Collector cut-off current	$I_{CER}$	$V_{CE}=55\text{V}$ , $R=10\text{M}\Omega$			0.1	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5\text{V}$ , $I_C=0$			0.1	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE}=6\text{V}$ , $I_C=1\text{mA}$	200		400	
	$h_{FE(2)}$	$V_{CE}=6\text{V}$ , $I_C=0.1\text{mA}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100\text{mA}$ , $I_B=10\text{mA}$			0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=100\text{mA}$ , $I_B=10\text{mA}$			1	V
Transition frequency	$f_T$	$V_{CE}=6\text{V}$ , $I_C=10\text{mA}$ , $f=30\text{MHz}$	150			MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=10\text{V}$ , $I_E=0$ , $f=1\text{MHz}$			3.0	pF
Noise figure	NF	$V_{CE}=6\text{V}$ , $I_C=0.1\text{mA}$ $R_g=10\text{k}\Omega$ , $f=1\text{kHz}$		4	10	dB

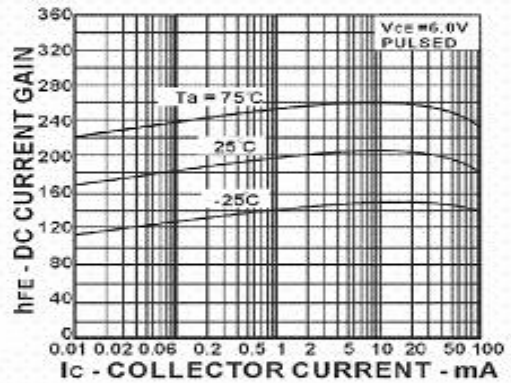
## Typical Characteristics



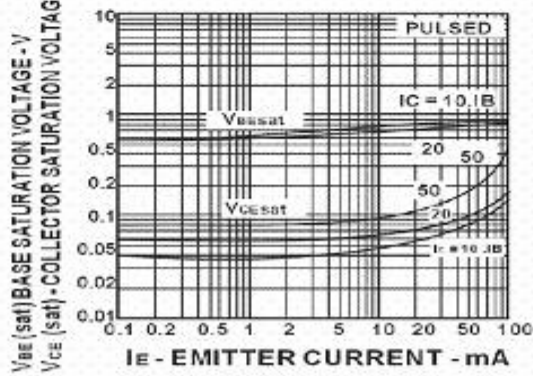
**COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE**



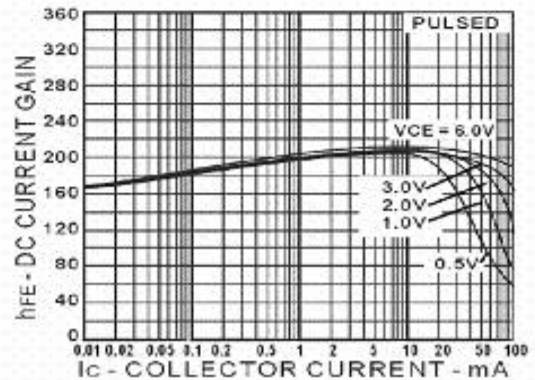
**DC CURRENT GAIN vs. COLLECTOR CURRENT**



**COLLECTOR AND BASE SATURATION VOLTAGE vs. COLLECTOR CURRENT**



**DC CURRENT GAIN vs. COLLECTOR CURRENT**



## **PACKAGE OUTLINE**

**Plastic surface mounted package; 3 leads**

## 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 [Hong Kong Chuangji 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](#)