

## TRANSISTOR (NPN)

#### **FEATURES**

Complimentary to S8550

Collector Current: I<sub>C</sub>=0.8A

SOT-23

1. BASE
2. EMITTER

3. COLLECTOR

**MARKING: J3Y** 

MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

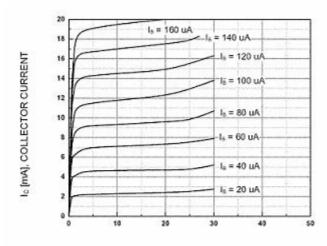
Symbol	Parameter	Value	Units	
V <sub>CBO</sub>	Collector-Base Voltage	40	V	
V <sub>CEO</sub>	Collector-Emitter Voltage	25	V	
V <sub>EBO</sub>	Emitter-Base Voltage	5	V	
$I_{C}$	Collector Current -Continuous	0.8	A	
P <sub>C</sub>	Collector Dissipation	0.35	W	
T <sub>j</sub>	Junction Temperature	150	$^{\circ}$	
T <sub>stg</sub>	Storage Temperature	-55-150	$^{\circ}$	

**ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)** 

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 100μA, I <sub>E</sub> =0	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I <sub>C</sub> =1mA, I <sub>B</sub> =0	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I <sub>E</sub> =100μA, I <sub>C</sub> =0	5			V
Collector cut-off current	Ісво	V <sub>CB</sub> =40 V, I <sub>E</sub> =0			0.1	μA
Collector cut-off current	I <sub>CEO</sub>	V <sub>CB</sub> =20V, I <sub>E</sub> =0			0.1	μΑ
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> = 5V, I <sub>C</sub> =0			0.1	μΑ
	H <sub>FE(1)</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> = 50mA	200		350	
DC current gain	H <sub>FE(2)</sub>	V <sub>CE</sub> =1V, I <sub>C</sub> = 500mA	50			
Collector-emitter saturation voltage	V <sub>CE</sub> (sat)	I <sub>C</sub> =500 mA, I <sub>B</sub> = 50mA			0.6	V
Base-emitter saturation voltage	V <sub>BE</sub> (sat)	I <sub>C</sub> =500 mA, I <sub>B</sub> = 50mA			1.2	V
Transition frequency	f⊤	V <sub>CE</sub> =6V, I <sub>C</sub> = 20mA <b>f</b> =30MHz	150			MHz

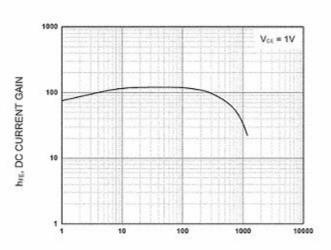


# **Typical Characteristics**



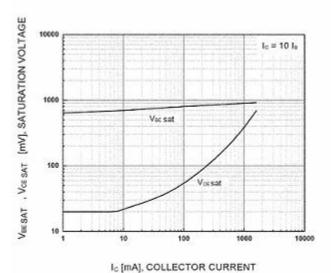
V<sub>∞</sub> [V], COLLECTOR-EMITTER VOLTAGE

Static Characteristic

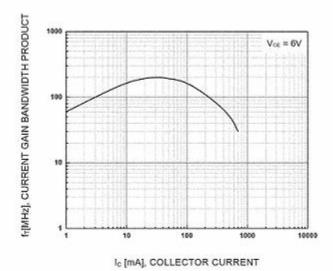


Ic [mA], COLLECTOR CURRENT

DC current Gain



Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage



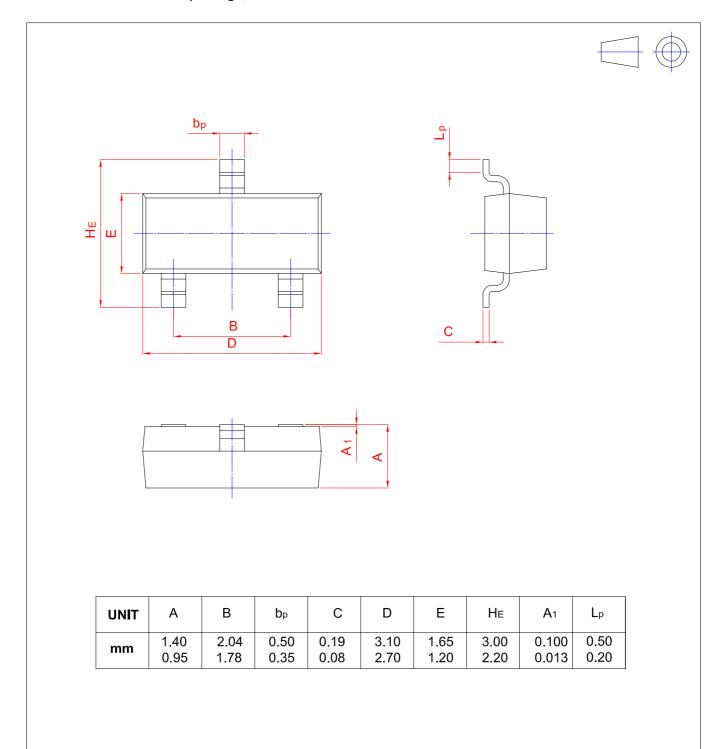
**Current Gain Bandwidth Product** 



#### **PACKAGE OUTLINE**

#### Plastic surface mounted package; 3 leads

SOT-23



### **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 WPMtek manufacturer:

Other Similar products are found below:

619691C MCH4017-TL-H MMBT-2369-TR BC546/116 BC557/116 BSW67A NJVMJD148T4G NTE123AP-10 NTE153MCP NTE16

NTE195A NTE92 2N4401-A 2N6728 2SA1419T-TD-H 2SA2126-E 2SB1204S-TL-E 2SC2712S-GR,LF SP000011176 2N2907A 2N3904
NS 2N5769 2SC2412KT146S CPH6501-TL-E MCH4021-TL-E MJE340 Jantx2N5416 US6T6TR NJL0281DG 732314D CPH3121-TL-E

CPH6021-TL-H 873787E IMZ2AT108 MMST8098T146 UMX21NTR MCH6102-TL-E NJL0302DG 30A02MH-TL-E NTE13 NTE26

NTE282 NTE323 NTE350 NTE81 STX83003-AP JANTX2N2920L JANSR2N2222AUB CMLT3946EG TR 2SA1371D-AE