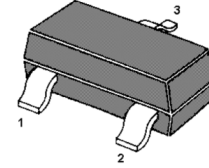


NPN Silicon Epitaxial Planar Transistor

For switching and amplifier applications. Especially suitable for AF-driver stages and low power output stages.



1. Base 2. Emitter 3. Collector
SOT-23 Plastic Package

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CB0}	40	V
Collector Emitter Voltage	V_{CEO}	25	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current	I_C	1	A
Power Dissipation	P_{tot}	350	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $V_{CE} = 1\text{ V}$, $I_C = 100\text{ mA}$	h_{FE}	200	400	-
at $V_{CE} = 1\text{ V}$, $I_C = 800\text{ mA}$				-
Collector Base Cutoff Current at $V_{CB} = 35\text{ V}$	I_{CB0}	-	100	nA
Emitter Base Cutoff Current at $V_{EB} = 6\text{ V}$	I_{EBO}	-	100	nA
Collector Base Breakdown Voltage at $I_C = 100\text{ }\mu\text{A}$	$V_{(BR)CBO}$	40	-	V
Collector Emitter Breakdown Voltage at $I_C = 2\text{ mA}$	$V_{(BR)CEO}$	25	-	V
Emitter Base Breakdown Voltage at $I_E = 100\text{ }\mu\text{A}$	$V_{(BR)EBO}$	6	-	V
Collector Emitter Saturation Voltage at $I_C = 800\text{ mA}$, $I_B = 80\text{ mA}$	$V_{CE(sat)}$	-	0.5	V
Base Emitter Saturation Voltage at $I_C = 800\text{ mA}$, $I_B = 80\text{ mA}$	$V_{BE(sat)}$	-	1.2	V
Base Emitter Voltage at $V_{CE} = 1\text{ V}$, $I_C = 10\text{ mA}$	$V_{BE(on)}$	-	1	V
Gain Bandwidth Product at $V_{CE} = 10\text{ V}$, $I_C = 50\text{ mA}$	f_T	120	-	MHz

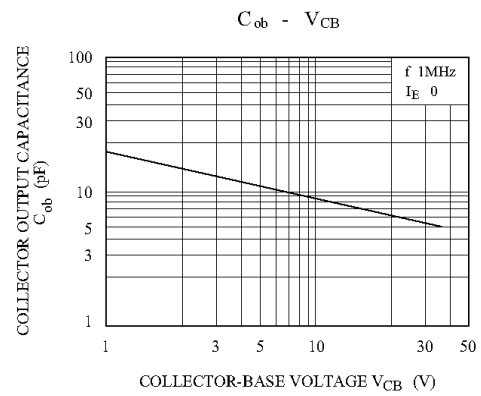
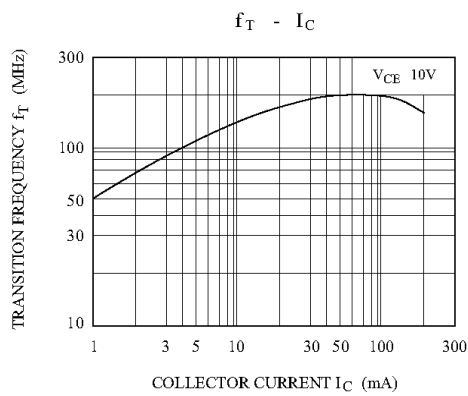
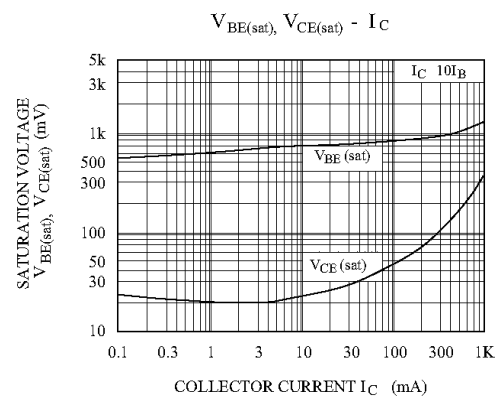
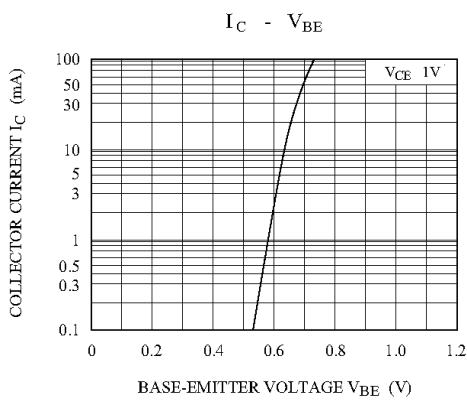
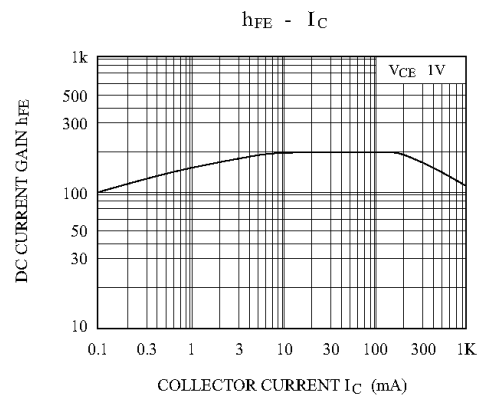
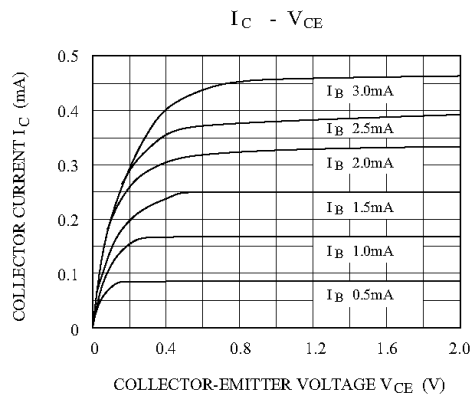
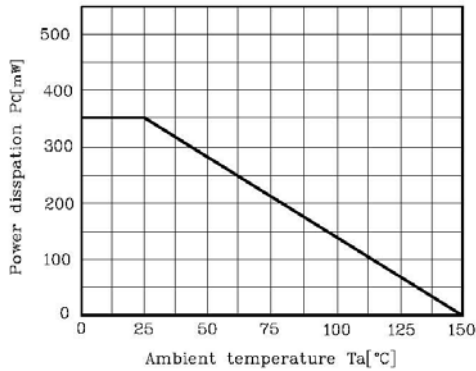


Fig. 1 $P_C T_a$



RESTRICTIONS ON PRODUCT USE

- The information contained herein is subject to change without notice.
- SK is continually working to improve the quality and reliability of its products. Nevertheless, semiconductor devices in general can malfunction or fail due to their inherent electrical sensitivity and vulnerability to physical stress. It is the responsibility of the buyer, when utilizing SK products, to comply with the standards of safety in making a safe design for the entire system, and to avoid situations in which a malfunction or failure of such SK products could cause loss of human life, bodily injury or damage to property. In developing your designs, please ensure that SK products are used within specified operating ranges as set forth in the most recent SK products specifications. Also, please keep in mind the precautions and conditions set forth in the “Handling Guide for Semiconductor Devices,” or “SK Semiconductor Reliability Handbook” etc.
- The SK products listed in this document are intended for usage in general electronics applications (computer, personal equipment, office equipment, measuring equipment, industrial robotics, domestic appliances, etc.). These SK products are neither intended nor warranted for usage in equipment that requires extraordinarily high quality and/or reliability or a malfunction or failure of which may cause loss of human life or bodily injury (“Unintended Usage”). Unintended Usage include atomic energy control instruments, airplane or spaceship instruments, all types of safety devices, etc.. Unintended Usage of SK products listed in his document shall be made at the customer’s own risk.
- The information contained herein is presented only as a guide for the applications of our products. No responsibility is assumed by SK for any infringements of patents or other rights of the third parties which may result from its use. No license is granted by implication or otherwise under any patents or other rights of SK or the third parties.
- Please contact your sales representative for product-by-product details in this document regarding RoHS & REACH compatibility. Please use these products in this document in compliance with all applicable laws and regulations that regulate the inclusion or use of controlled substances. SK assumes no liability for damage or losses occurring as a result of noncompliance with applicable laws and regulations.

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 [Shikues manufacturer](#):

Other Similar products are found below :

[619691C](#) [MCH4017-TL-H](#) [MJ15024/WS](#) [MJ15025/WS](#) [BC546/116](#) [BC556/FSC](#) [BC557/116](#) [BSW67A](#) [HN7G01FU-A\(T5L,F,T](#)
[NJVMJD148T4G](#) [NSVMMBT6520LT1G](#) [NTE187A](#) [NTE195A](#) [NTE2302](#) [NTE2330](#) [NTE2353](#) [NTE316](#) [IMX9T110](#) [NTE63](#) [NTE65](#)
[C4460](#) [SBC846BLT3G](#) [2SA1419T-TD-H](#) [2SA1721-O\(TE85L,F\)](#) [2SA1727TLP](#) [2SA2126-E](#) [2SB1202T-TL-E](#) [2SB1204S-TL-E](#) [2SC5488A-](#)
[TL-H](#) [2SD2150T100R](#) [SP000011176](#) [FMC5AT148](#) [2N2369ADCSM](#) [2SB1202S-TL-E](#) [2SC2412KT146S](#) [2SC4618TLN](#) [2SC5490A-TL-H](#)
[2SD1816S-TL-E](#) [2SD1816T-TL-E](#) [CMXT2207 TR](#) [CPH6501-TL-E](#) [MCH4021-TL-E](#) [BC557B](#) [TTC012\(Q\)](#) [BULD128DT4](#) [JANTX2N3810](#)
[Jantx2N5416](#) [US6T6TR](#) [KSF350](#) [068071B](#)