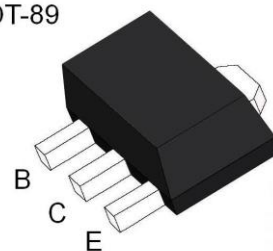


Features

- High breakdown Voltage
- High DC Current Gain

Marking: N95

SOT-89


Absolute Maximum Ratings Ta=25°C unless otherwise noted

Parameter	Symbol	Value	Unit
Collector-base voltage	BV_{CBO}	170	V
Collector-emitter voltage	BV_{CEO}	150	V
Emitter-base voltage	BV_{EBO}	5	V
Collector current	I_C	1	A
Collector current pulse	I_{CP}	2	A
Collector power dissipation	P_C	1	W
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-65~150	°C

Electrical Characteristics Ta=25°C unless otherwise noted

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BV_{CBO}	$I_C = 100\mu A, I_E = 0$	170			V
Collector-emitter breakdown voltage	BV_{CEO}	$I_C = 1mA, I_B = 0$	150			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E = 100\mu A, I_C = 0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB} = 150V, I_E = 0$			100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = 4V, I_C = 0$			100	nA
DC current gain*	h_{FE}	$V_{CE} = 10V, I_C = 1mA$ $V_{CE} = 10V, I_C = 250mA$ $V_{CE} = 10V, I_C = 500mA$ $V_{CE} = 10V, I_C = 1A$	100 100 50 10		300	
Collector-emitter saturation voltage*	$V_{CE(sat)}$	$I_C = 250mA, I_B = 25mA$ $I_C = 500mA, I_B = 50mA$			0.2 0.3	V
Base-emitter saturation voltage*	$V_{BE(sat)}$	$I_C = 500mA, I_B = 50mA$			1.0	V
Base-emitter on voltage*	$V_{BE(on)}$	$V_{CE} = 10V, I_C = 500mA$			1.0	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 50mA$ $f = 100MHz$	100			MHz
Collector output capacitance	C_{ob}	$V_{CB} = 10V, f = 1MHz$			10	pF

*Measured under pulsed conditions. Pulse width = 300μs. Duty cycle ≤ 2%

Typical Characteristics

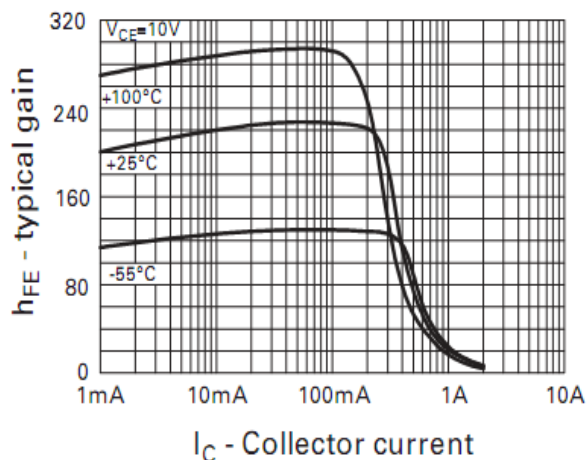


Figure 1. DC current Gain

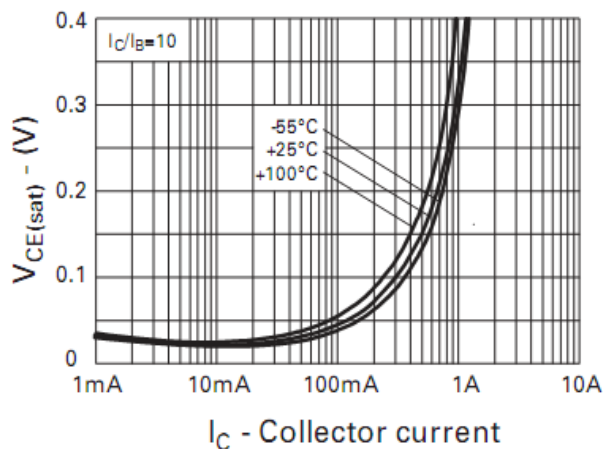


Figure 2. Collector-Emitter Saturation Region

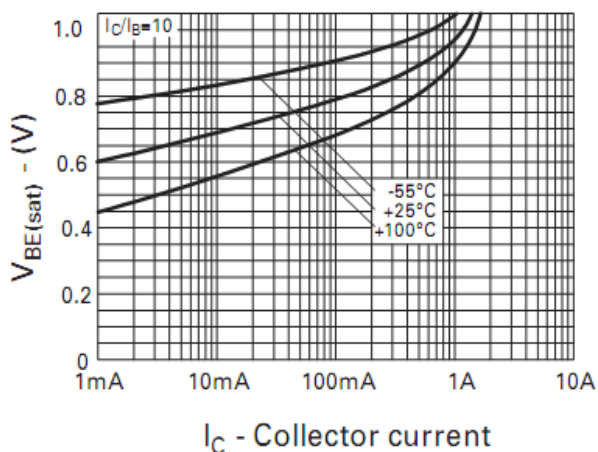


Figure 3. Base-Emitter Voltage

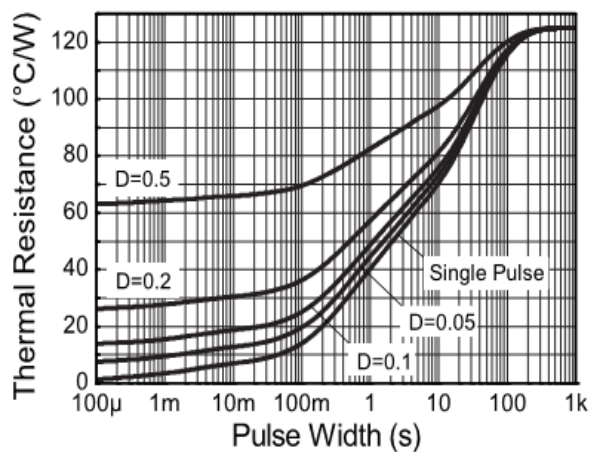


Figure 4. Transient Thermal impedance

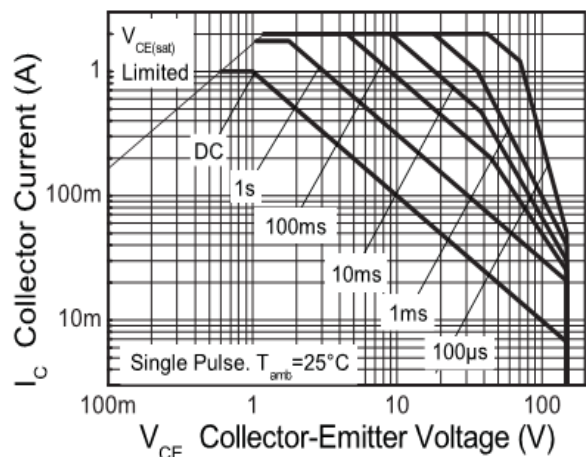


Figure 5. Safe Operating Area

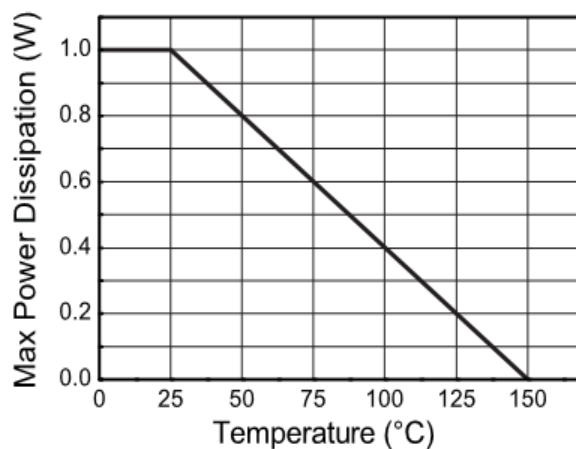


Figure 6. Power derating curves

Package Dimensions

Dim	Millimeter		Inches	
	Min.	Max.	Min.	Max.
A	1.40	1.60	0.055	0.063
b	0.32	0.52	0.013	0.020
b1	0.38	0.58	0.015	0.023
c	0.35	0.45	0.014	0.018
D	4.40	4.60	0.173	0.181
D1	1.45	1.65	0.057	0.065
D2	1.70	1.80	0.067	0.071
E	2.30	2.60	0.091	0.102
E1	3.95	4.25	0.156	0.167
E2	1.80	2.00	0.071	0.079
e	1.40	1.60	0.055	0.063
e1	2.80	3.20	0.110	0.126
L	0.90	1.20	0.035	0.047

NOTICE

The information presented in this document is for reference only. Involving product optimization and productivity improvement, ChipNobo reserves the right to adjust product indicators and upgrade some technical parameters. ChipNobo is entitled to be exempted from liability for any delay or non-delivery of the information disclosure process that occurs.

本文件中提供的信息仅供参考。涉及产品优化和生产效率改善，ChipNobo 有权调整产品指标和部分技术参数的升级，所出现信息披露过程存在延后或者不能送达的情形，ChipNobo 有获免责权。

The product listed herein is designed to be used with residential and commercial equipment, and do not support sensitive items and specialized equipment in areas where sanctions do exist. ChipNobo Co., Ltd or anyone on its behalf, assumes no responsibility or liability for any damages resulting from improper use.

此处列出的产品旨在民用和商业设备上使用，不支持确有制裁地区的敏感项目和特殊设备，ChipNobo 有限公司或其代表，对因不当使用而造成的任何损害不承担任何责任。

For additional information, please visit our website <http://www.chipnobo.com>, or consult your nearest Chipnobo sales office for further assistance.

欲了解更多信息，请访问我们的网站 <http://www.chipnobo.com>，或咨询离您最近的 Chipnobo 销售办事处以获得进一步帮助。