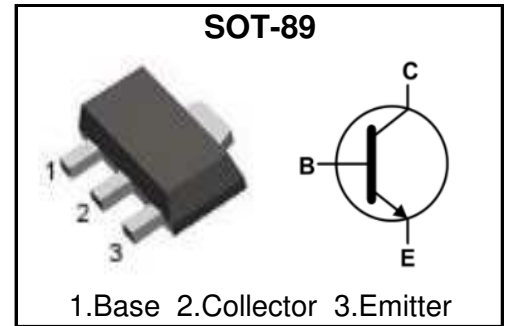


150V NPN MEDIUM POWER TRANSISTOR

Features

1. BVCEO > 150V
2. IC = 1A High Continuous Current
3. Low Saturation Voltage VCE(sat)<300mV @0.5A
4. Marking: N95



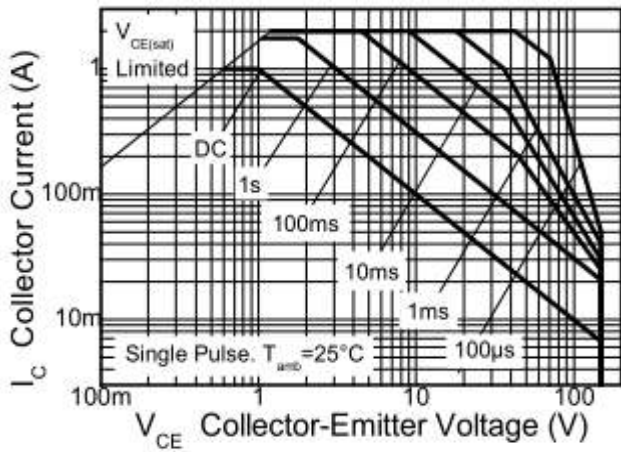
Maximum ratings(Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V _{CBO}	170	V
Collector Emitter Voltage	V _{CEO}	150	V
Emitter Base Voltage	V _{EBO}	7	V
Collector Current	I _C	1	A
Collector Power Dissipation	P _C	1	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{stg}	-65~150	°C

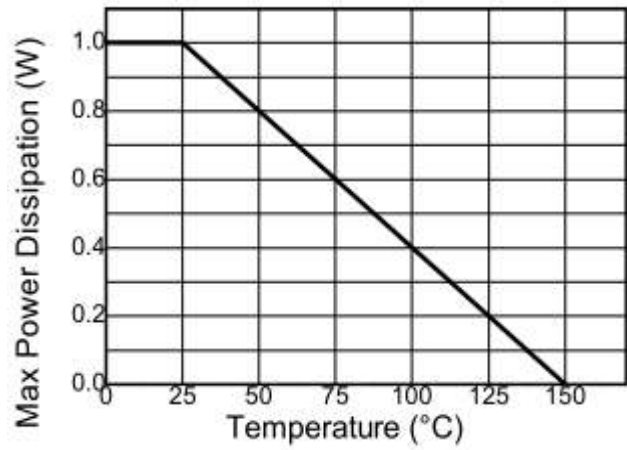
Electrical Characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	V _{CBO}	I _C =100uA I _E =0	170		V
Collector-Emitter Breakdown Voltage	V _{CEO}	I _C =1mA I _B =0	150		V
Emitter-Base Breakdown Voltage	V _{EBO}	I _E =100uA I _C =0	7		V
Collector Cutoff Current	I _{CBO}	V _{CB} =150V I _E =0		100	nA
Emitter Cutoff Current	I _{EBO}	V _{EB} =5.6V I _C =0		100	nA
DC Current Gain	H _{FE}	V _{CE} =10V I _C =1mA	100		
		V _{CE} =10V I _C =250mA	100	300	
		V _{CE} =10V I _C =500mA	50		
		V _{CE} =10V I _C =1A	10		
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C =250mA I _B =25mA		0.2	V
	V _{CE(sat)}	I _C =500mA I _B =50mA		0.3	
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _C =500mA I _B =50mA		1	V
Base-Emitter Turn-On Voltage	V _{BE(on)}	V _{CE} =10V I _C =500mA		1	V
Transition frequency	f _T	V _{CE} =10V I _C =50mA	100		MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, f=1MHz		10	pF

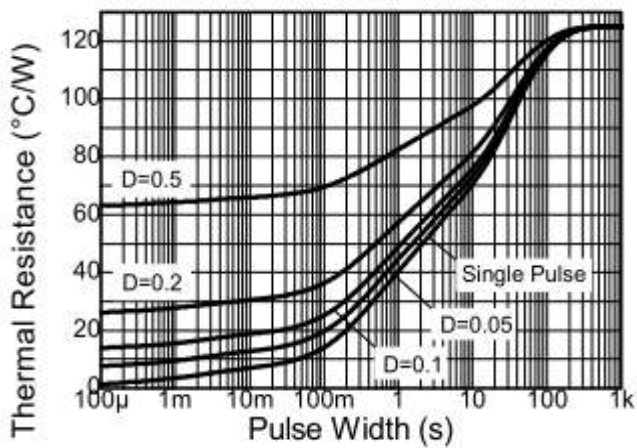
RATING AND CHARACTERISTICS CURVES (RTFCX495T89)



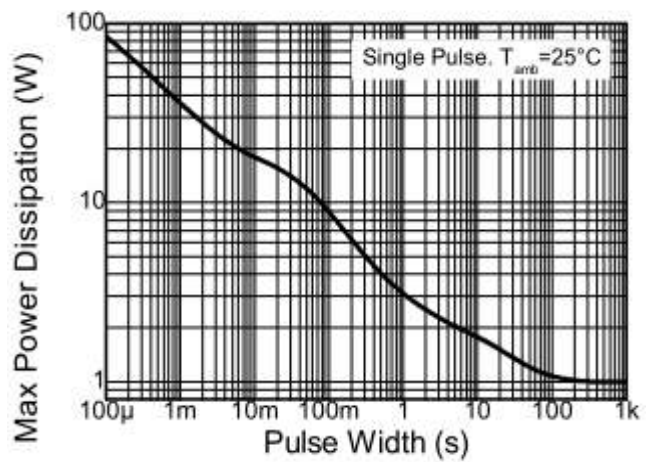
Safe Operating Area



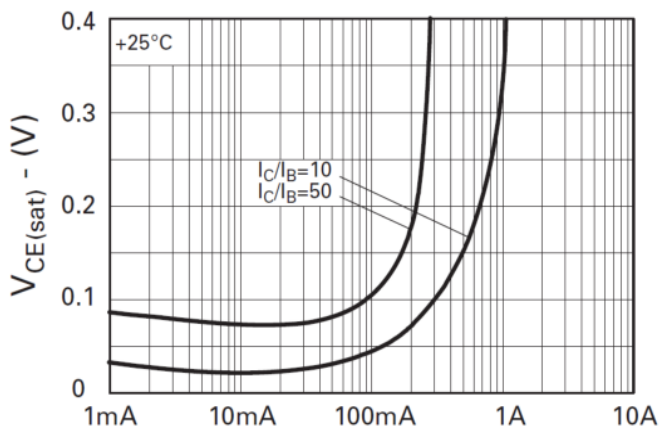
Derating Curve



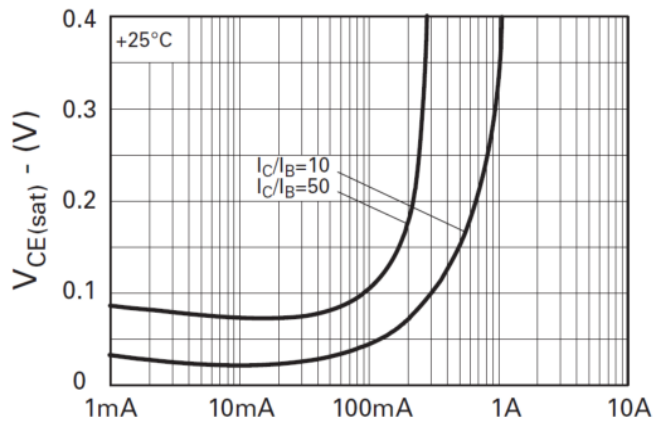
Transient Thermal Impedance



Pulse Power Dissipation

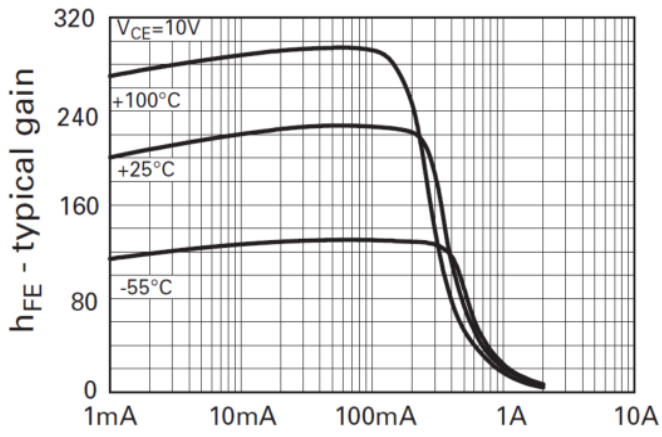


I_C - Collector current
 $V_{CS(sat)}$ vs. I_C

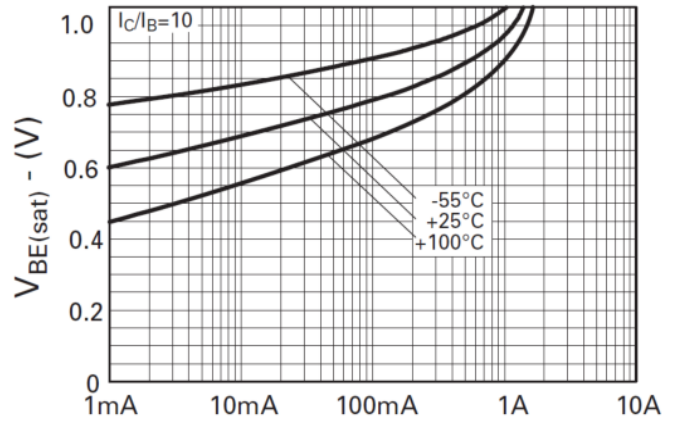


I_C - Collector current
 $V_{CS(sat)}$ vs. I_C

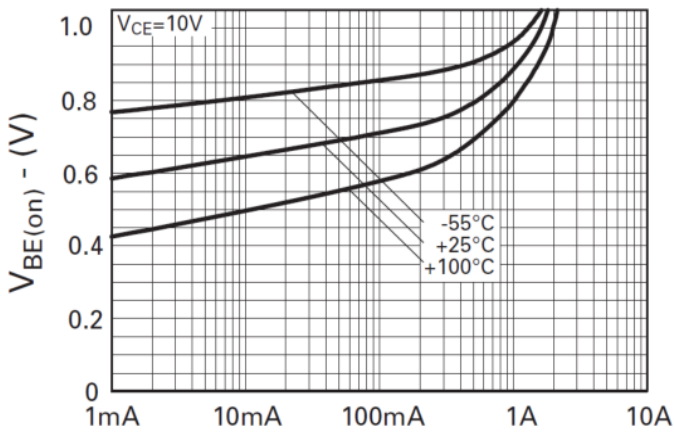
RATING AND CHARACTERISTICS CURVES (RTFCX495T89)



I_C - Collector current
 h_{FE} vs. I_C

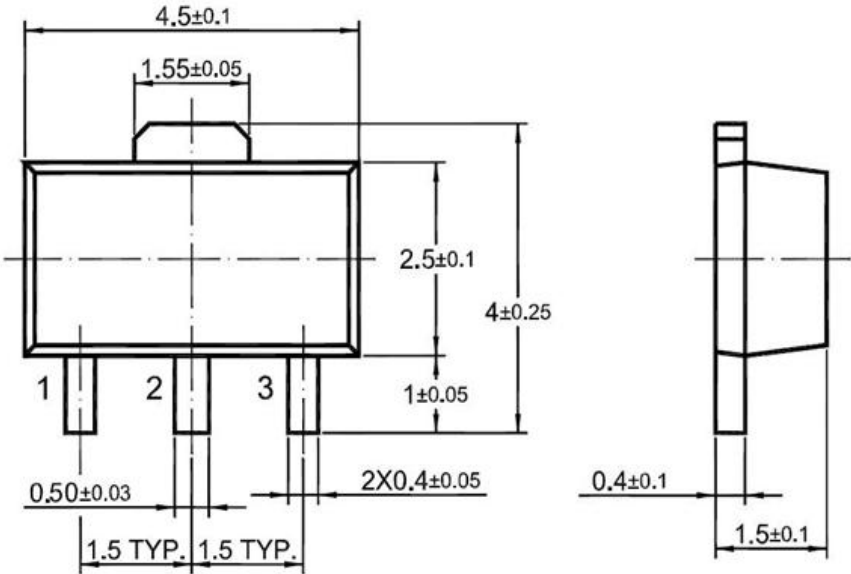


I_C - Collector current
 $V_{BE(sat)}$ vs. I_C



I_C - Collector current
 $V_{BE(on)}$ vs. I_C

Package Outline Dimensions



Package	Packaging code	Reel Size	Quantity	Box	Carton
SOT-89	-T	7 inch	1000 pcs	12000pcs	48000pcs

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