



Features

$I_C = 0.6A$ Continuous Collector Current

500mW Power Dissipation

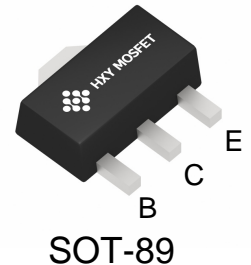
Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
DXT2222A-13	SOT-89	1P	1000

1. BASE

2. COLLECTOR

3. EMITTER



Maximum Ratings ($T_a=25^{\circ}C$ unless otherwise noted)

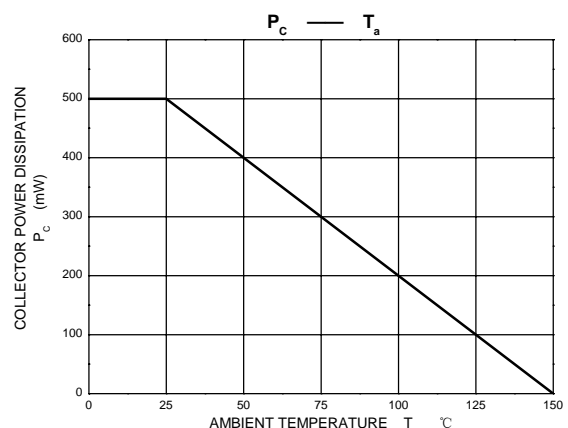
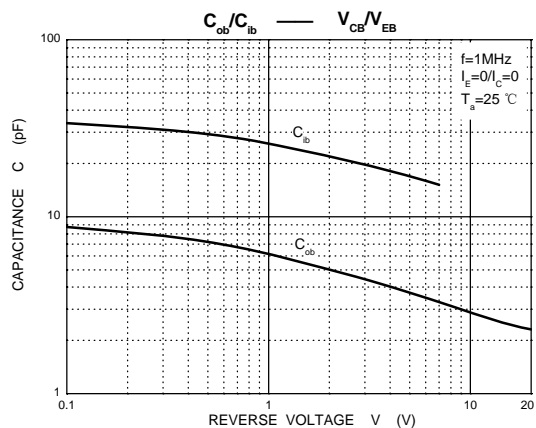
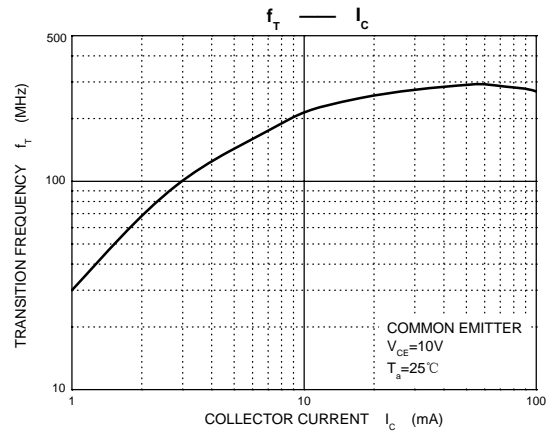
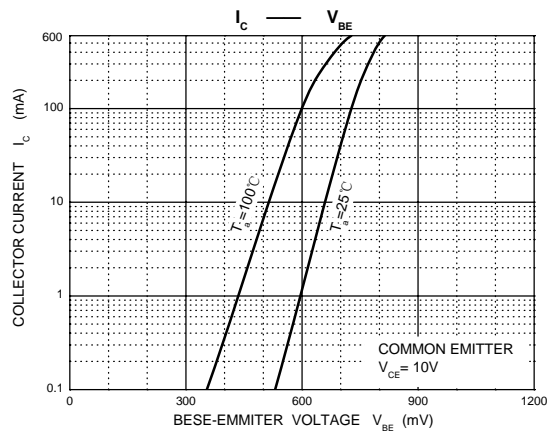
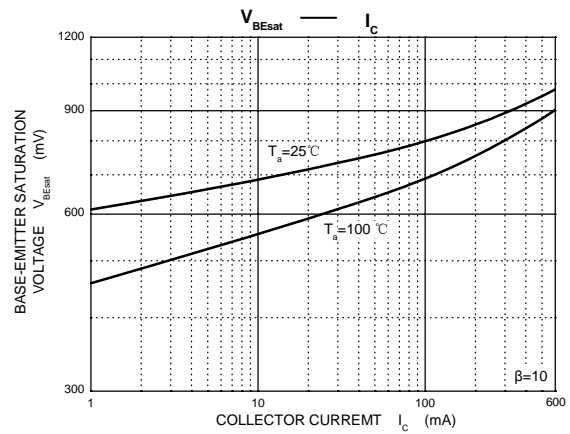
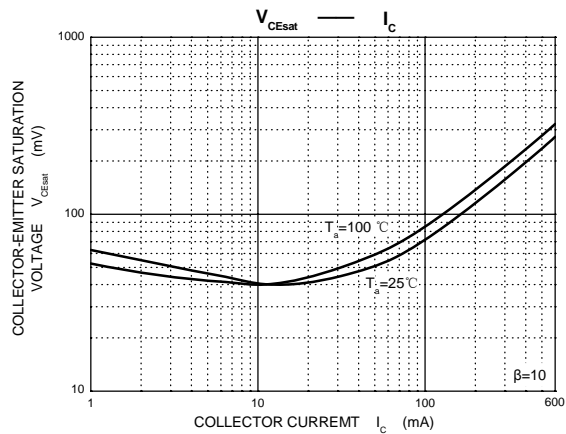
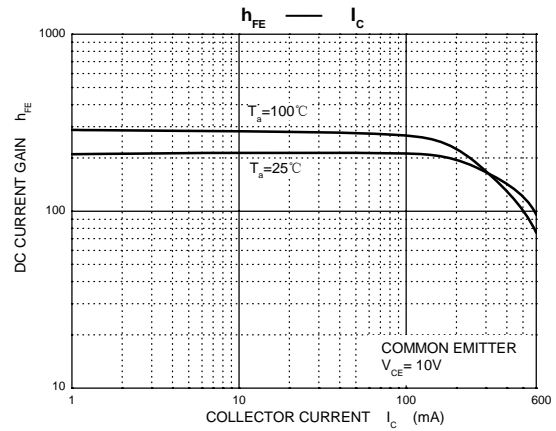
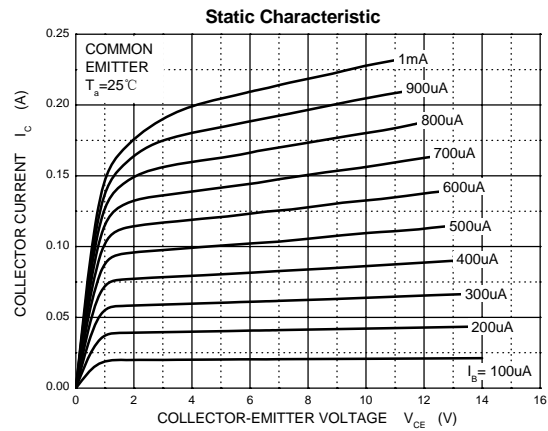
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	75	V
V_{CEO}	Collector-Emitter Voltage	40	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	600	mA
P_C	Collector Power Dissipation	0.5	W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~150	$^{\circ}C$

Electrical Characteristics ($T_a=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 10\mu A, I_E = 0$	75		V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 10mA, I_B = 0$	40		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 10\mu A, I_C = 0$	6		V
Collector cut-off current	I_{CBO}	$V_{CB} = 60V, I_E = 0$		0.01	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5V, I_C = 0$		0.01	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = 10V, I_C = 0.1mA$	35		
	$h_{FE(2)}$	$V_{CE} = 10V, I_C = 1mA$	50		
	$h_{FE(3)}$	$V_{CE} = 10V, I_C = 10mA$	75		
	$h_{FE(4)}$	$V_{CE} = 10V, I_C = 150mA$	100	300	
	$h_{FE(5)}$	$V_{CE} = 1V, I_C = 150mA$	50		
	$h_{FE(6)}$	$V_{CE} = 10V, I_C = 500mA$	40		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500mA, I_B = 50mA$		1	V
	$V_{CE(sat)}$	$I_C = 150mA, I_B = 15mA$		0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 500mA, I_B = 50mA$		2.0	V
	$V_{BE(sat)}$	$I_C = 150mA, I_B = 15mA$	0.6	1.2	V
Transition frequency	f_T	$V_{CE} = 10V, I_C = 20mA$ $f = 100MHz$	300		MHz
Output Capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		8	pF
Delay time	t_d	$V_{CC} = 30V, I_C = 150mA$		10	ns
Rise time	t_r	$V_{BE(off)} = 0.5V, I_{B1} = 15mA$		25	ns
Storage time	t_s	$V_{CC} = 30V, I_C = 150mA$		225	ns
Fall time	t_f	$I_{B1} = -I_{B2} = 15mA$		60	ns

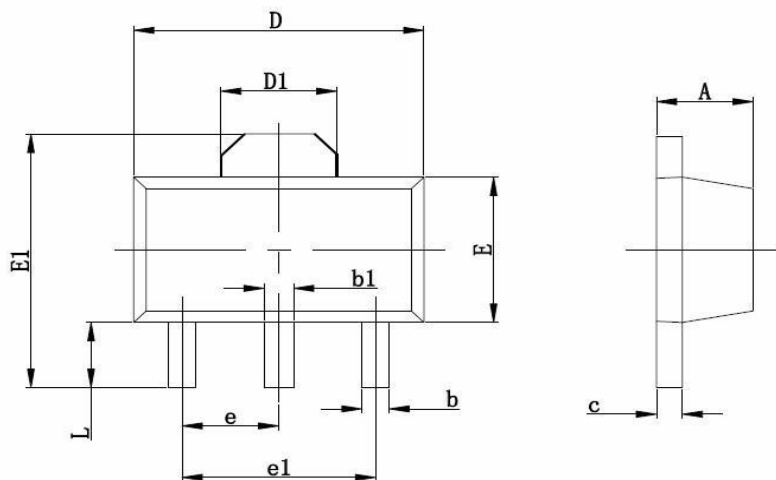


Typical Characteristics





SOT-89 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.400	1.600	0.055	0.063
b	0.320	0.520	0.013	0.020
b1	0.400	0.580	0.016	0.023
c	0.350	0.440	0.014	0.017
D	4.400	4.600	0.173	0.181
D1	1.550 REF.		0.061 REF.	
E	2.300	2.600	0.091	0.102
E1	3.940	4.250	0.155	0.167
e	1.500 TYP.		0.060 TYP.	
e1	3.000 TYP.		0.118 TYP.	
L	0.900	1.200	0.035	0.047



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