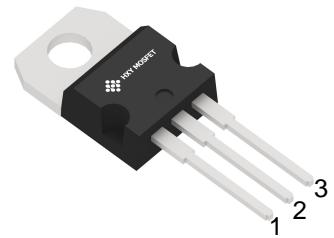




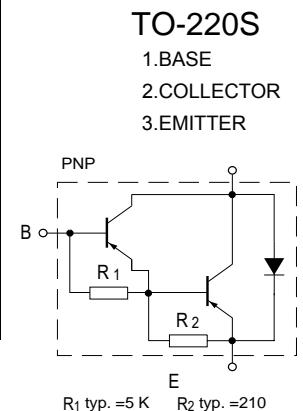
Features

- Medium Power Complementary Silicon Transistors



Maximum Ratings (Ta=25 unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-5	A
P_c	Collector Power Dissipation	2	W
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	62.5	°C/W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	°C

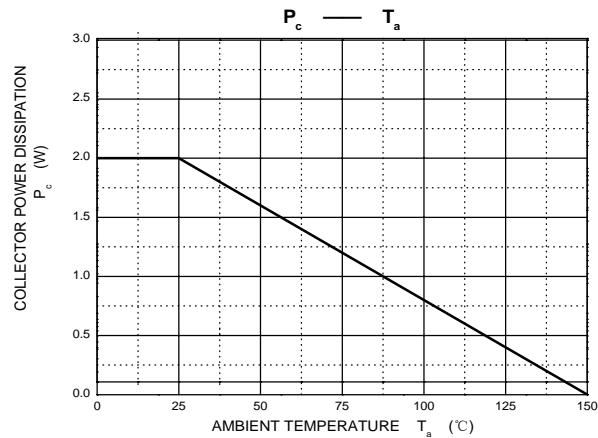
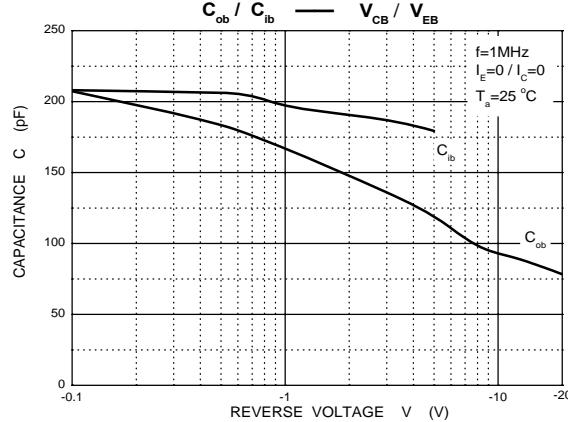
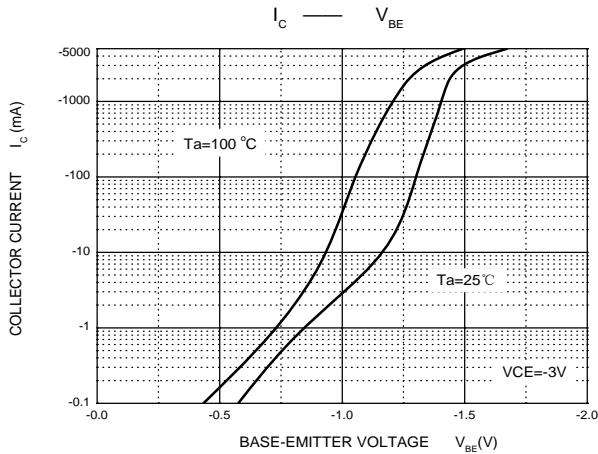
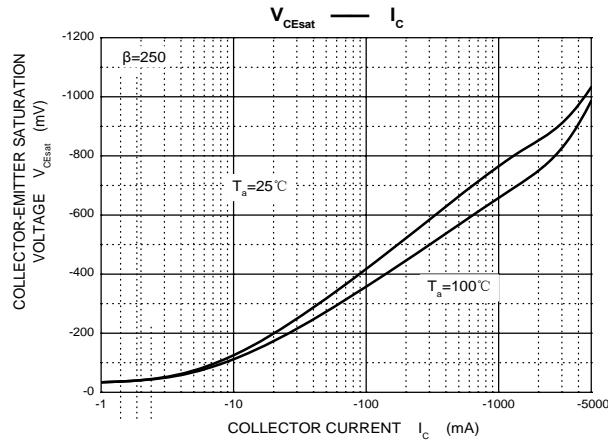
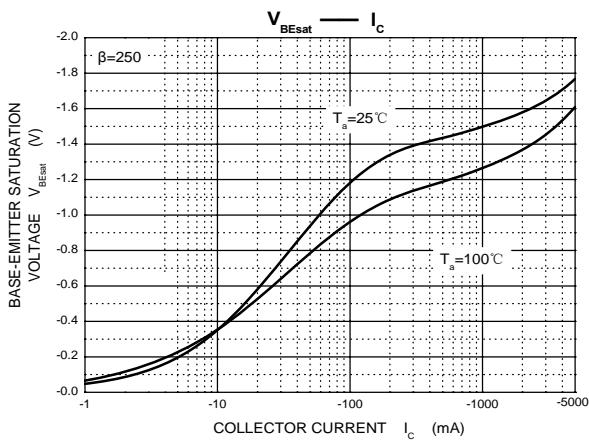
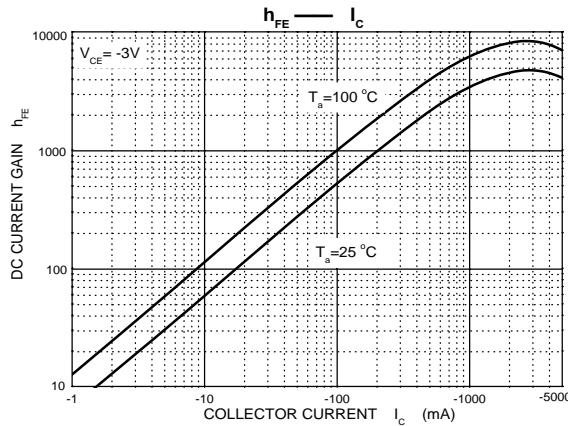
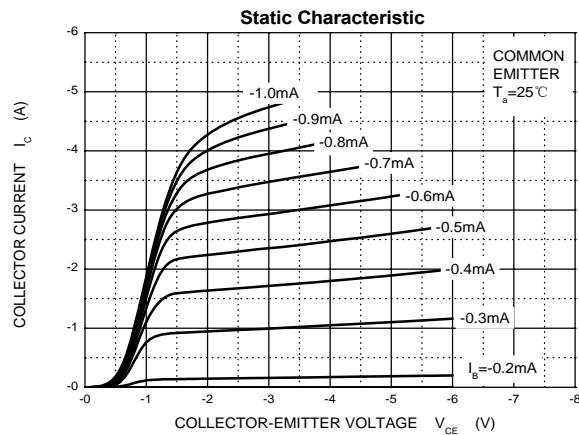


Electrical Characteristics (Ta=25 unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -1\text{mA}, I_E = 0$	-100		V
Collector-emitter breakdown voltage	$V_{CEO(sus)}$	$I_C = -30\text{mA}, I_B = 0$	-100		V
Collector cut-off current	I_{CBO}	$V_{CB} = -100\text{V}, I_E = 0$		-0.2	mA
Collector cut-off current	I_{CEO}	$V_{CE} = -50\text{ V}, I_B = 0$		-0.5	mA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{ V}, I_C = 0$		-2	mA
DC current gain	$h_{FE(1)}$	$V_{CE} = -3\text{V}, I_C = -0.5\text{A}$	1000		
	$h_{FE(2)}$	$V_{CE} = -3\text{V}, I_C = -3\text{ A}$	1000	12000	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -3\text{A}, I_B = -12\text{mA}$ $I_C = -5\text{ A}, I_B = -20\text{mA}$		-2 -4	V
Base-emitter voltage	V_{BE}	$V_{CE} = -3\text{V}, I_C = -3\text{ A}$		-2.5	V
Output Capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 0.1\text{MHz}$		300	pF

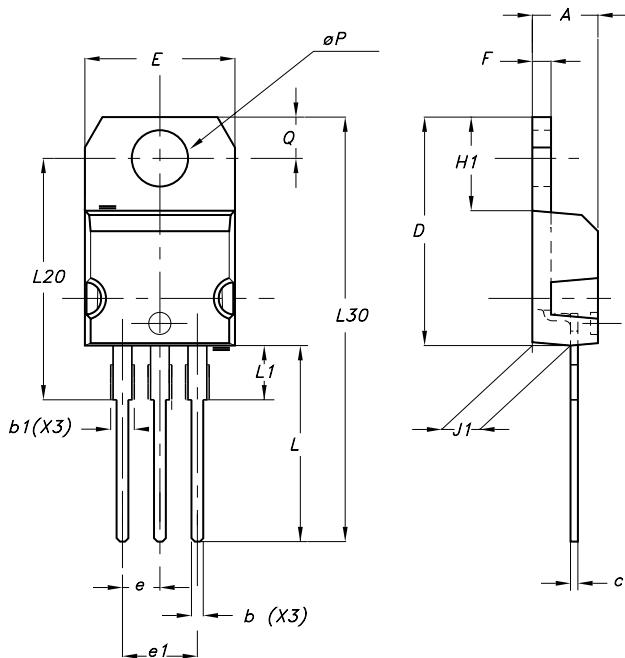


Typical Characteristics





Package Information TO-220S



DIM.	mm.			inch		
	MIN.	Typ	MAX.	MIN.	Typ.	MAX.
A	4.40		4.60	0.173		0.181
b	0.61		0.88	0.024		0.034
b1	1.15		1.70	0.045		0.066
c	0.49		0.70	0.019		0.027
D	15.25		15.75	0.60		0.620
E	10		10.40	0.393		0.409
e	2.40		2.70	0.094		0.106
e1	4.95		5.15	0.194		0.202
F	1.23		1.32	0.048		0.052
H1	6.20		6.60	0.244		0.256
J1	2.40		2.72	0.094		0.107
L	13		14	0.511		0.551
L1	3.50		3.93	0.137		0.154
L20		16.40			0.645	
L30		28.90			1.137	
øP	3.75		3.85	0.147		0.151
Q	2.65		2.95	0.104		0.116



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