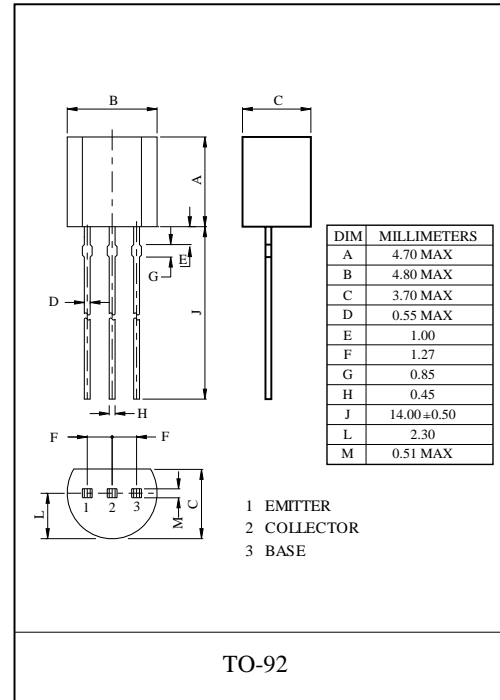


## NPN SILICON POWER TRANSISTORS

Purpose: High frequency electronic lighting ballast applications,  
converters, inverters, switching regulators, etc.

Absolute maximum ratings (Ta=25°C)

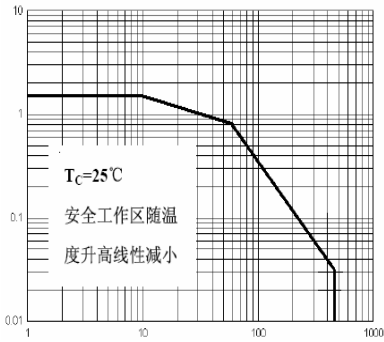
Symbol	Rating	Unit
$V_{CB0}$	700	V
$V_{CE0}$	450	V
$V_{EB0}$	9.0	V
$I_C$	1.5	A
$P_C(Ta=25^\circ C)$	1.0	W
$T_j$	150	°C
$T_{stg}$	-55~150	°C



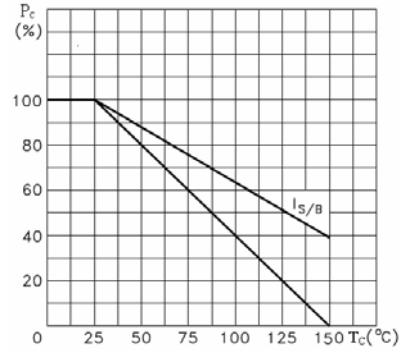
Electrical characteristics (Ta=25°C)

Symbol	Test condition		Rating			Unit
			Min	Typ	Max	
$V_{CB0}$	$I_C=1mA$	$I_E=0$	700			V
$V_{CE0}$	$I_C=10mA$	$I_B=0$	450			V
$V_{EB0}$	$I_E=1mA$	$I_C=0$	9.0			V
$I_{CB0}$	$V_{CB}=700V$	$I_E=0$			0.1	mA
$I_{CE0}$	$V_{CE}=450V$	$I_B=0$			0.1	mA
$I_{EB0}$	$V_{EB}=9.0V$	$I_C=0$			0.1	mA
$h_{FE}$	$V_{CE}=5V$	$I_C=0.2A$	10		40	
$V_{CE(sat)}$	$I_C=1A$	$I_B=0.25A$			0.9	V
$V_{BE(sat)}$	$I_C=1A$	$I_B=0.5A$			1.2	V
$f_T$	$V_{CE}=10V$	$I_C=0.1A$	$f=1.0MHz$	5.0		MHz
$t_f$	$V_{CE}=5V$	$I_C=0.25A$	(UI9600)		0.8	μs
$t_s$					4.0	μs

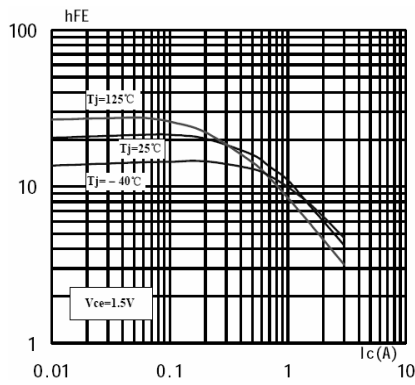
SOA (DC)



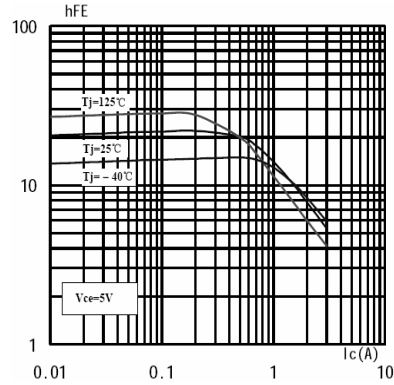
$P_c - T_c$



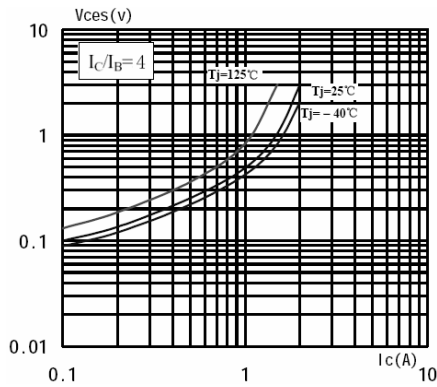
$h_{FE} - I_c$



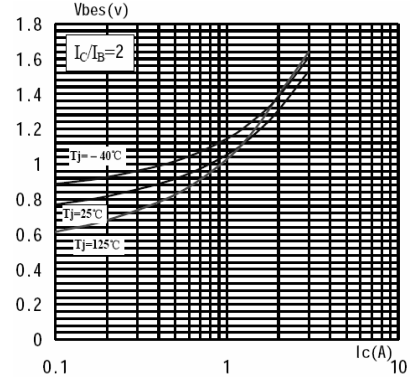
$h_{FE} - I_c$



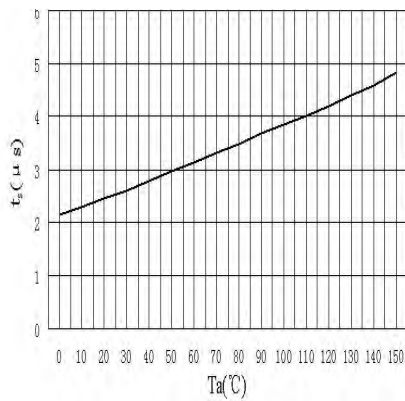
$V_{ces} - I_c$



$V_{bes} - I_c$



$t_s - T_a$



$h_{FE} - T_a$

