

MJE13005DT7 (3DD13005DT7)

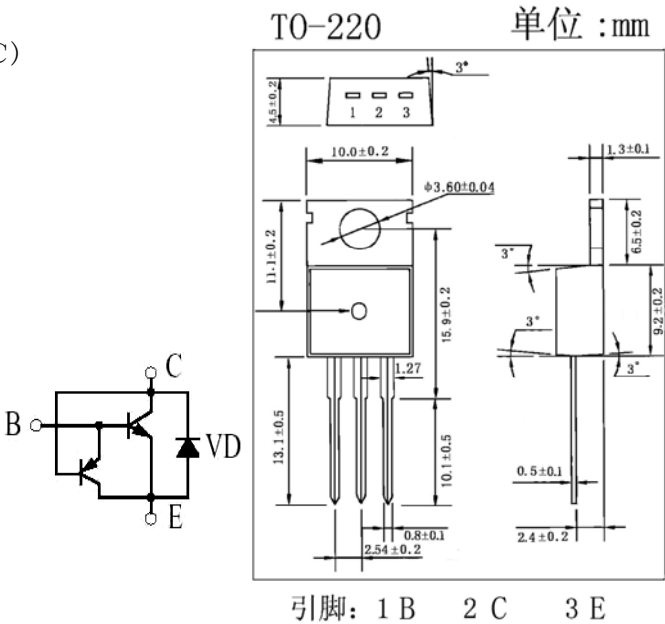
硅 NPN 半导体三极管/SILICON NPN TRANSISTOR

用途:用于高频电子照明电路、开关及开关电源。

Purpose: High frequency electronic lighting, switching power supply applications.

极限参数/Absolute maximum ratings(Ta=25℃)

参数符号 Symbol	数值 Rating	单位 Unit
V_{CB0}	700	V
V_{CE0}	400	V
V_{EB0}	9.0	V
I_C	4.0	A
I_B	2.0	A
$P_c(T_a=25^{\circ}C)$	2.0	W
$P_c(T_c=25^{\circ}C)$	75	W
T_j	150	℃
T_{stg}	-55~150	℃

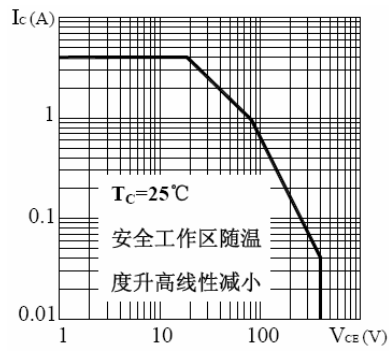


电性能参数/Electrical characteristics(Ta=25℃)

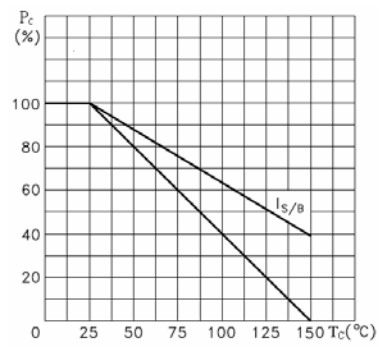
参数符号 Symbol	测试条件 Test condition		数值 Rating			单位 Unit
			最小值 Min	典型值 Typ	最大值 Max	
V_{CB0}	$I_C=1mA$	$I_E=0$	700			V
V_{CE0}	$I_C=10mA$	$I_B=0$	400			V
V_{EB0}	$I_E=1mA$	$I_C=0$	9.0			V
I_{CB0}	$V_{CB}=700V$	$I_E=0$			0.1	mA
I_{CE0}	$V_{CE}=400V$	$I_B=0$			0.1	mA
I_{EB0}	$V_{EB}=9.0V$	$I_C=0$			0.1	mA
$h_{FE(1)}$	$V_{CE}=5.0V$	$I_C=1.0A$	10		50	
$h_{FE(2)}$	$V_{CE}=5.0V$	$I_C=2.0A$	8.0		40	
$V_{CE(sat)(1)}$	$I_C=1.0A$	$I_B=0.2A$			1.0	V
$V_{CE(sat)(2)}$	$I_C=2.5A$	$I_B=0.5A$			1.5	V
$V_{CE(sat)(3)}$	$I_C=0.5A$	$I_B=0.1A$			0.7	V
$V_{BE(sat)(1)}$	$I_C=1.0A$	$I_B=0.2A$			1.2	V
$V_{BE(sat)(2)}$	$I_C=2.5A$	$I_B=0.5A$			1.3	V
C_{ob}	$V_{CB}=10V$	$f=1MHz$		65		pF
f_T	$V_{CE}=10V$	$I_C=0.5A$	$f=1MHz$	7.0		MHz
t_f	$V_{CE}=5V$	$I_C=0.5A$	(UI9600)		0.8	μs
t_s					4.0	μs

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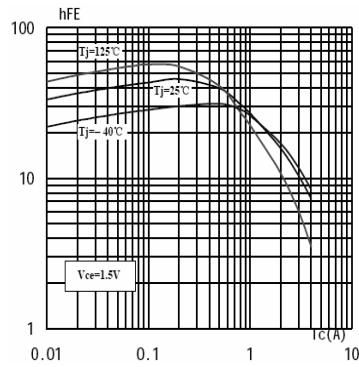
SOA (DC)



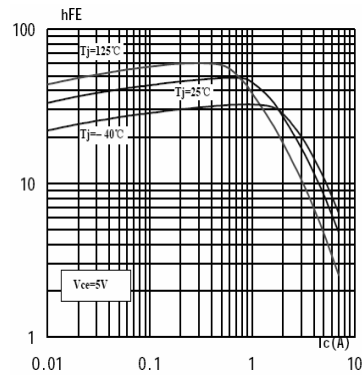
P_c-T_c



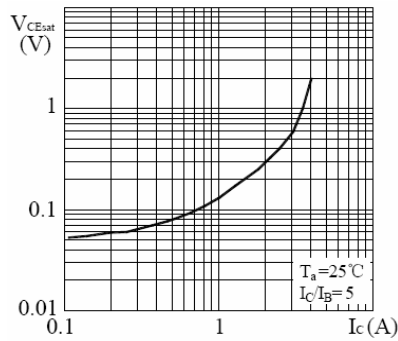
$h_{FE}-I_c$



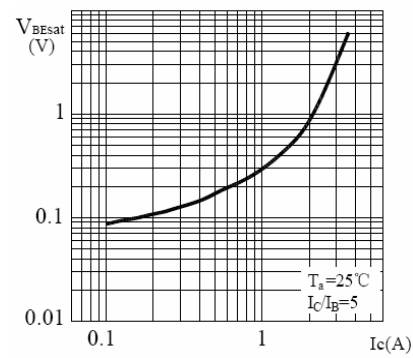
$h_{FE}-I_c$



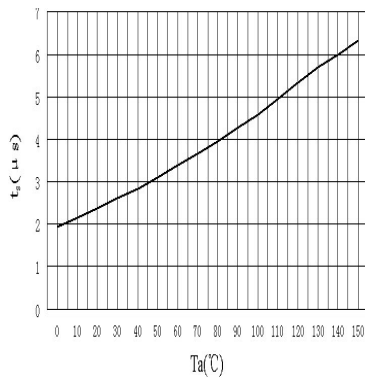
$V_{ces}-I_c$



$V_{bes}-I_c$



t_s-T_a



$h_{FE}-T_a$

