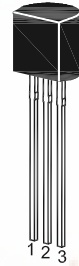


# ST 13002G

查询"13002G"供应商

## NPN Silicon Epitaxial Planar Transistor

High voltage power transistor



1. Emitter 2. Collector 3. Base  
TO-92 Plastic Package

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

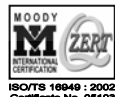
Parameter	Symbol	Value	Unit
Collector Emitter Voltage	$V_{CES}$	700	V
Collector Emitter Voltage	$V_{CEO}$	450	V
Emitter Base Voltage	$V_{EBO}$	9	V
Collector Current	$I_C$	0.5	A
Collector Peak Current	$I_{CM}$	1.5	A
Total Power Dissipation	$P_{tot}$	0.8	W
Operating Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 65 to + 150	$^\circ\text{C}$

### Characteristics at $T_a = 25^\circ\text{C}$

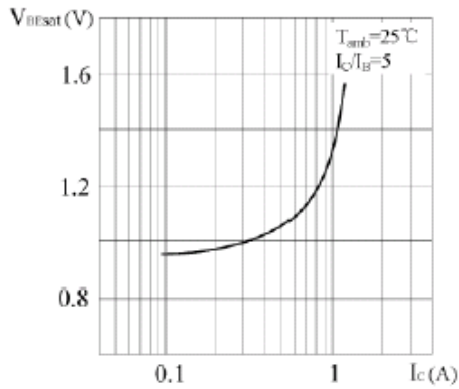
Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $V_{CE} = 2\text{ V}$ , $I_C = 200\text{ mA}$	$h_{FE}$	23	35	-
Collector Emitter Cutoff Current at $V_{CE} = 700\text{ V}$	$I_{CES}$	-	1	mA
Collector Emitter Breakdown Voltage at $I_C = 10\text{ mA}$	$V_{(BR)CEO}$	450	-	V
Emitter Base Breakdown Voltage at $I_E = 10\text{ mA}$	$V_{(BR)EBO}$	9	18	V
Collector Emitter Saturation Voltage at $I_C = 200\text{ mA}$ , $I_B = 40\text{ mA}$ at $I_C = 500\text{ mA}$ , $I_B = 100\text{ mA}$	$V_{CEsat}$	- -	0.5 1	V
Base Emitter Saturation Voltage at $I_C = 200\text{ mA}$ , $I_B = 40\text{ mA}$ at $I_C = 500\text{ mA}$ , $I_B = 100\text{ mA}$	$V_{BEsat}$	- -	1 1.2	V
Rise Time at $V_{CC} = 60\text{ V}$ , $I_C = 0.3\text{ A}$ , $I_B = -I_{B2} = 0.1\text{ A}$ , $t_p = 25\text{ }\mu\text{s}$	$t_r$	-	0.7	$\mu\text{s}$
Storage Time at $V_{CC} = 60\text{ V}$ , $I_C = 0.3\text{ A}$ , $I_B = -I_{B2} = 0.1\text{ A}$ , $t_p = 25\text{ }\mu\text{s}$	$t_s$	-	2.5	$\mu\text{s}$
Fall Time at $V_{CC} = 60\text{ V}$ , $I_C = 0.3\text{ A}$ , $I_B = -I_{B2} = 0.1\text{ A}$ , $t_p = 25\text{ }\mu\text{s}$	$t_f$	-	0.5	$\mu\text{s}$

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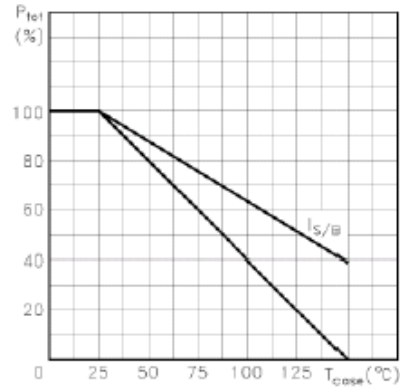
(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



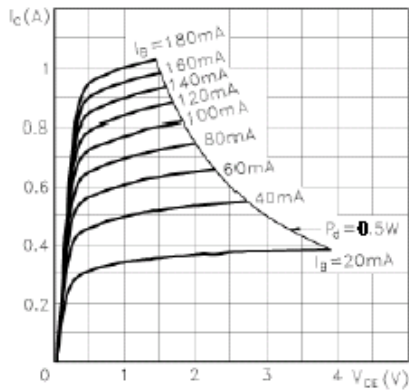
**Figure 3: Base-Emitter Saturation Voltage**



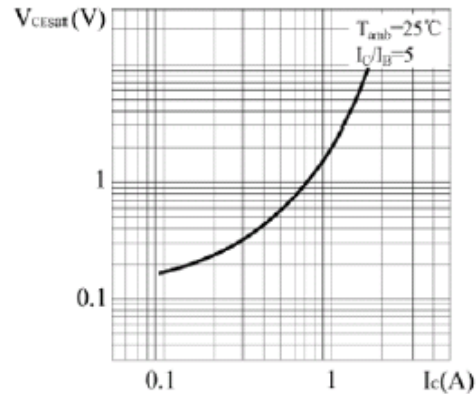
**Figure 6: Derating Curve**



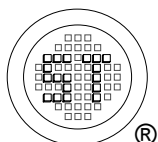
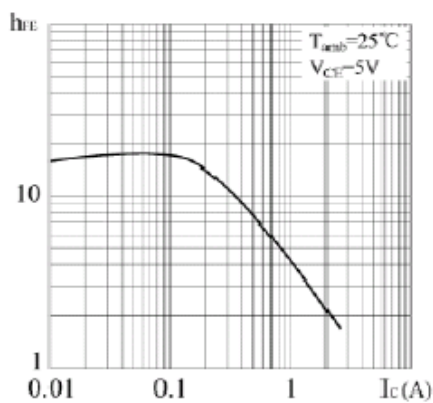
**Figure 4: Output Characteristics**



**Figure 7: Collector-Emitter Saturation Voltage**



**Figure 5: DC Current Gain**



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