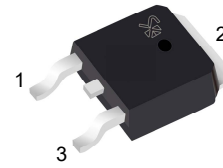


## COMPLEMENTARY SILICON POWER TRANSISTORS

### APPLICATIONS

SOLENOID/RELAY DRIVERS  
GENERAL PURPOSE SWITCHING AND  
AMPLIFIER



TO-252

1.Base 2. Collector 3.Emitter

TO-252 Plastic Package

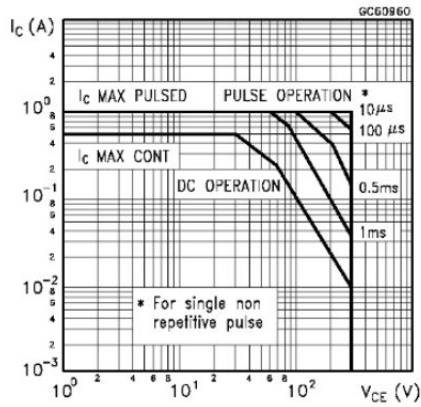
### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Collector Base Voltage	$V_{CBO}$	300	V
Collector Emitter Voltage	$V_{CEO}$	300	V
Emitter Base Voltage	$V_{EBO}$	5	V
Collector Current	$I_C$	0.5	A
Collector Dissipation	$P_C$	625	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{Stg}$	- 55 to + 150	$^\circ\text{C}$

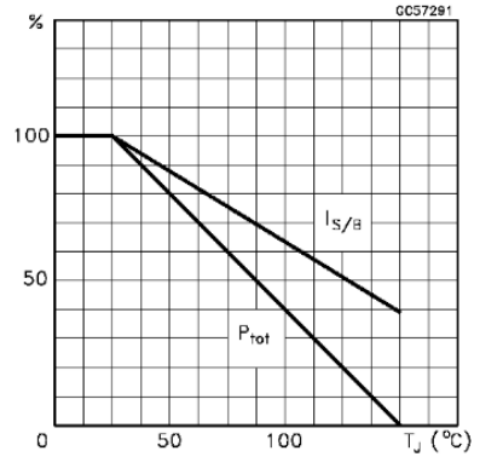
### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Collector Base Cutoff Current at $V_{CB} = 35\text{ V}$	$I_{CBO}$	-	-	0.5	$\mu\text{A}$
Emitter Base Cutoff Current at $V_{EB} = 6\text{ V}$	$I_{EBO}$	-	-	0.5	$\mu\text{A}$
Collector Base Breakdown Voltage at $I_C = 100\text{ }\mu\text{A}$	$V_{(BR)CBO}$	300	-	-	V
Collector Emitter Breakdown Voltage at $I_C = 2\text{ mA}$	$V_{(BR)CEO}$	300	-	-	V
Emitter Base Breakdown Voltage at $I_E = 100\text{ }\mu\text{A}$	$V_{(BR)EBO}$	5	-	-	V
Collector Emitter Saturation Voltage at $I_C = 800\text{ mA}$ , $I_B = 80\text{ mA}$	$V_{CE(sat)}$	-	-	0.5	V
Base Emitter Saturation Voltage at $I_C = 800\text{ mA}$ , $I_B = 80\text{ mA}$	$V_{BE(sat)}$	-	-	1.0	V
DC Current Gain at $V_{CE} = 10\text{ V}$ , $I_C = 10\text{ mA}$	$h_{FE}$	60		300	
Gain Bandwidth Product at $V_{CE} = 10\text{ V}$ , $I_C = 50\text{ mA}$	$f_T$	50	-	-	MHz

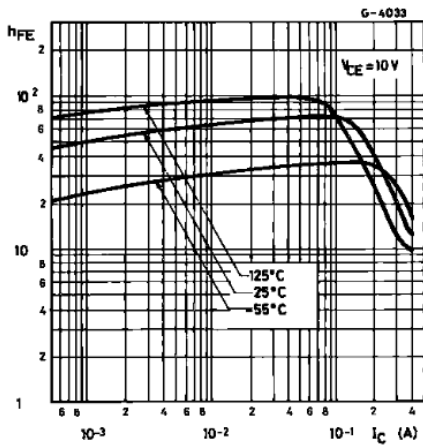
Safe Operating Area



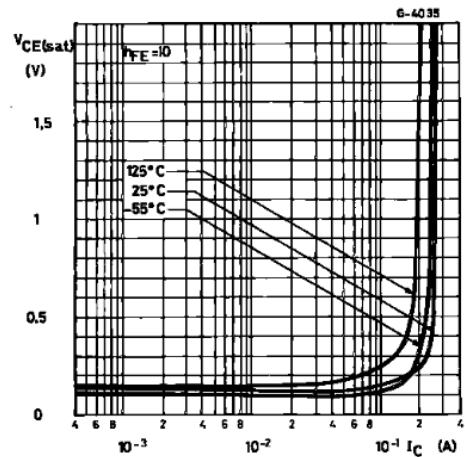
Derating Curve



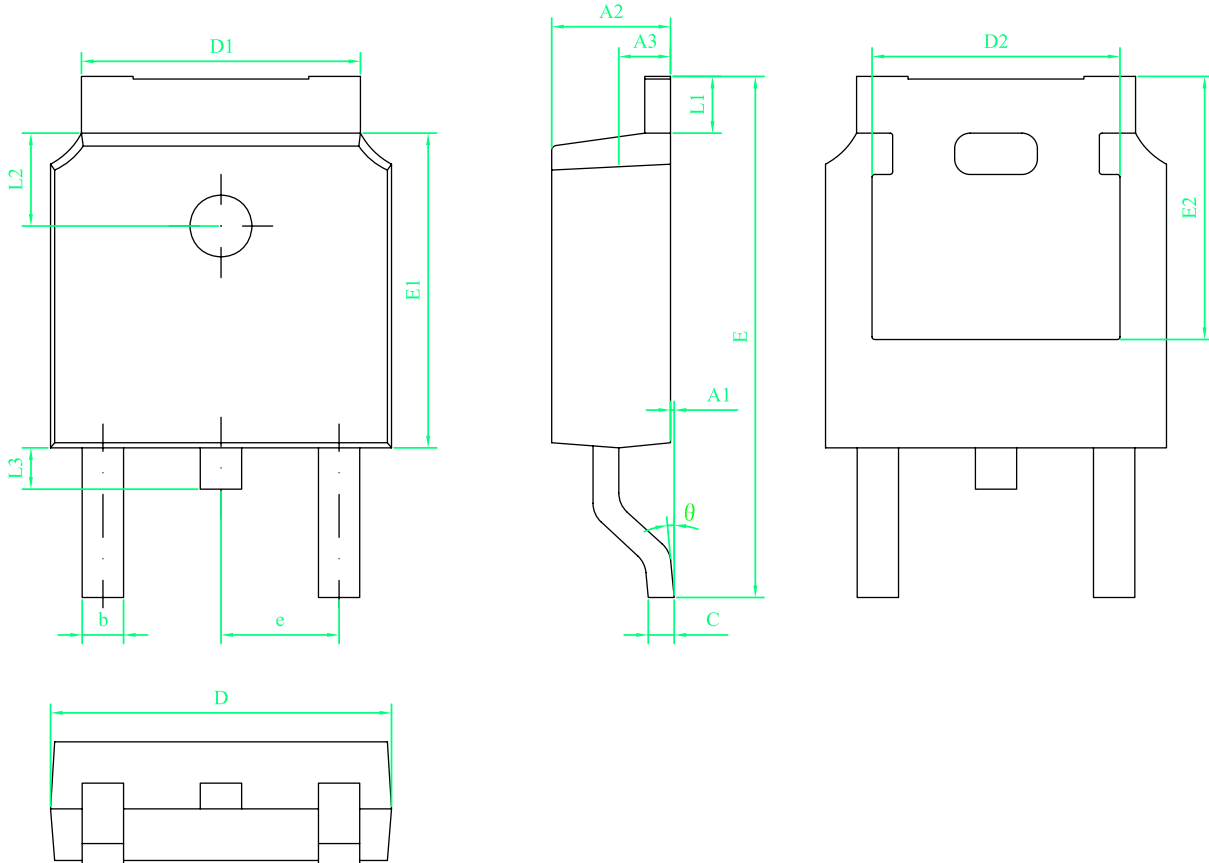
DC Current Gain



Collector Emitter Saturation Voltage



## TO-252 PACKAGE OUTLINE



符号	尺寸	
	Min	Max
A1	0.00	0.13
A2	2.18	2.39
A3	0.90	1.10
b	0.65	0.85
c	0.46	0.61
D	6.35	6.73
D1	4.95	5.46
D2	4.32	
E	9.40	10.41
E1	5.97	6.22
E2	5.21	
e	2.286 BSC	
L1	0.89	1.27
L2	1.70	1.90
L3	0.60	1.00
θ	0.00	8.00