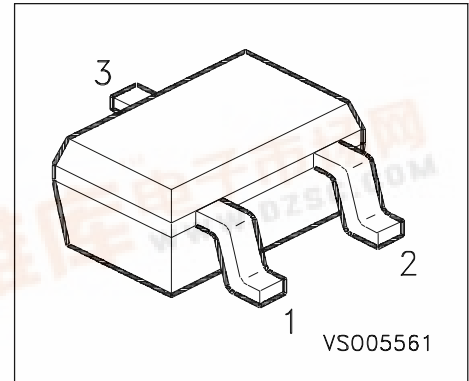


SIEMENS

BF 660W

PNP Silicon RF Transistor

- For VHF oscillator applications



Type	Marking	Ordering Code	Pin Configuration			Package
BF 660W	LEs	Q62702-F1568	1 = B	2 = E	3 = C	SOT-323

Maximum Ratings

Parameter	Symbol	Values	Unit
Collector-emitter voltage	V_{CEO}	30	V
Collector-base voltage	V_{CBO}	40	
Emitter-base voltage	V_{EBO}	4	
Collector current	I_C	25	mA
Base current	I_B	5	
Total power dissipation $T_S \leq 93\text{ }^\circ\text{C}$	P_{tot}	280	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	- 65 ... + 150	

Thermal Resistance

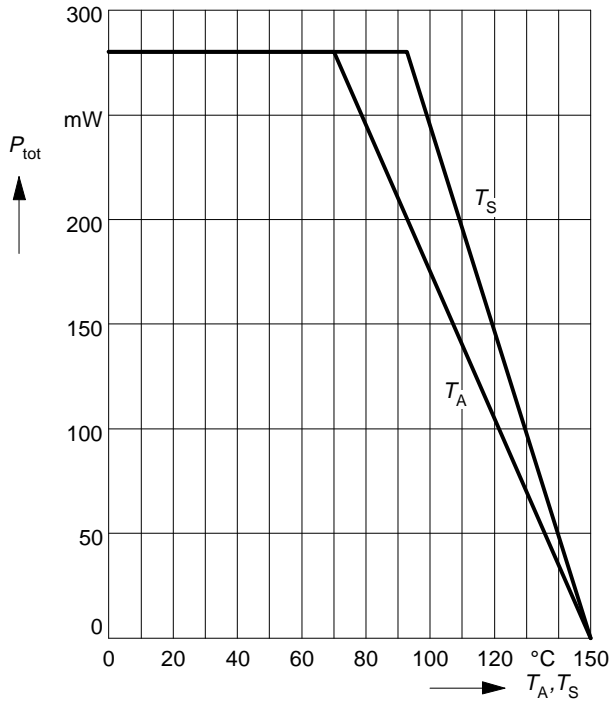
Junction - soldering point	R_{thJS}	205	K/W
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Electrical Characteristics at $T_A = 25^\circ\text{C}$, unless otherwise specified.

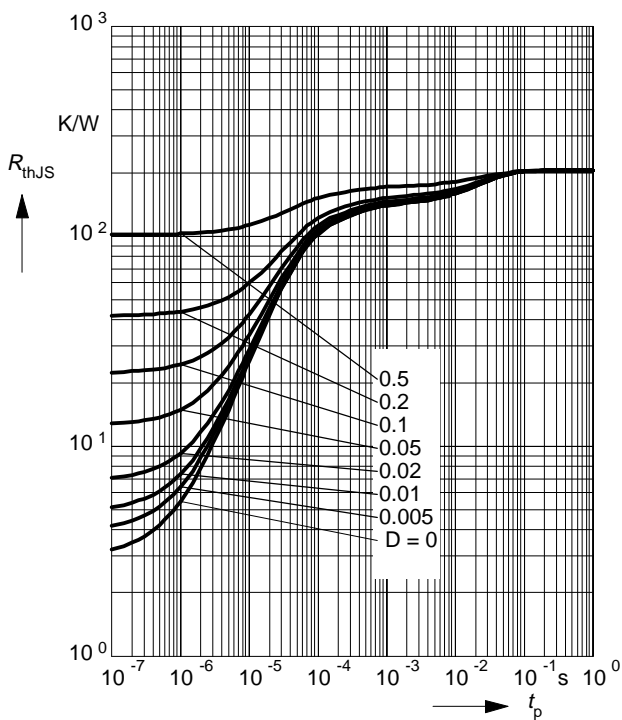
Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC Characteristics					
Collector-emitter breakdown voltage $I_C = 1 \text{ mA}, I_B = 0$	$V_{(BR)CEO}$	30	-	-	V
Collector-base breakdown voltage $I_C = 10 \mu\text{A}, I_E = 0$	$V_{(BR)CBO}$	40	-	-	
Base-emitter breakdown voltage $I_E = 10 \mu\text{A}, I_C = 0$	$V_{(BR)EBO}$	4	-	-	
Collector-base cutoff current $V_{CB} = 20, I_E = 0$	I_{CBO}	-	-	50	nA
DC current gain $I_C = 3 \text{ mA}, V_{CE} = 10 \text{ V}$	h_{FE}	30	-	-	-
AC Characteristics					
Transition frequency $I_C = 5 \text{ mA}, V_{CE} = 10 \text{ V}, f = 100 \text{ MHz}$	f_T	-	700	-	MHz
Collector-base capacitance $V_{CB} = 10 \text{ V}, V_{BE} = v_{be} = 0, f = 1 \text{ MHz}$	C_{cb}	-	0.4	-	pF
Collector-emitter capacitance $V_{CE} = 10 \text{ V}, V_{BE} = v_{be} = 0, f = 1 \text{ MHz}$	C_{ce}	-	0.15	-	

Total power dissipation $P_{tot} = f(T_A^*, T_S)$

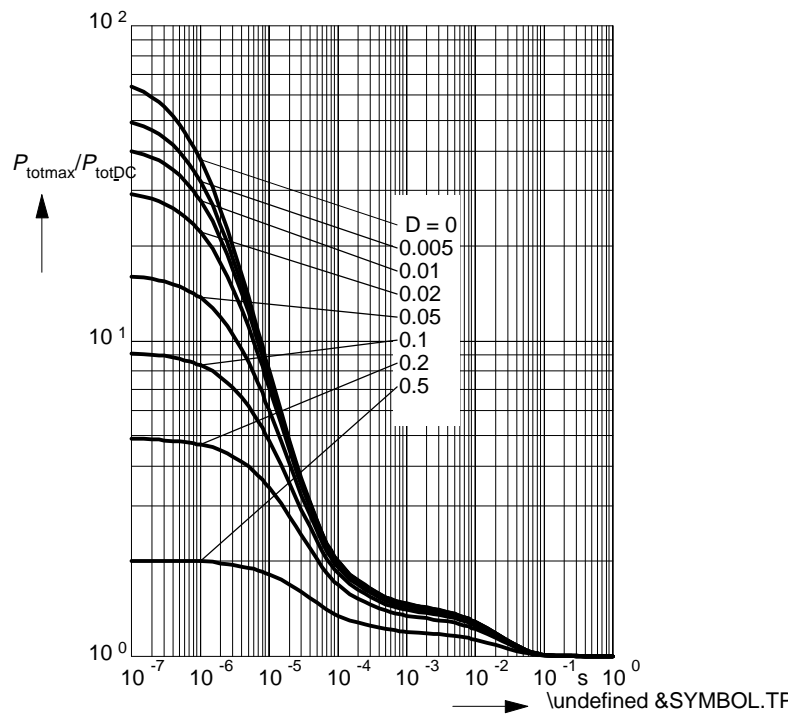
* Package mounted on epoxy



Permissible Pulse Load $R_{thJS} = f(t_p)$



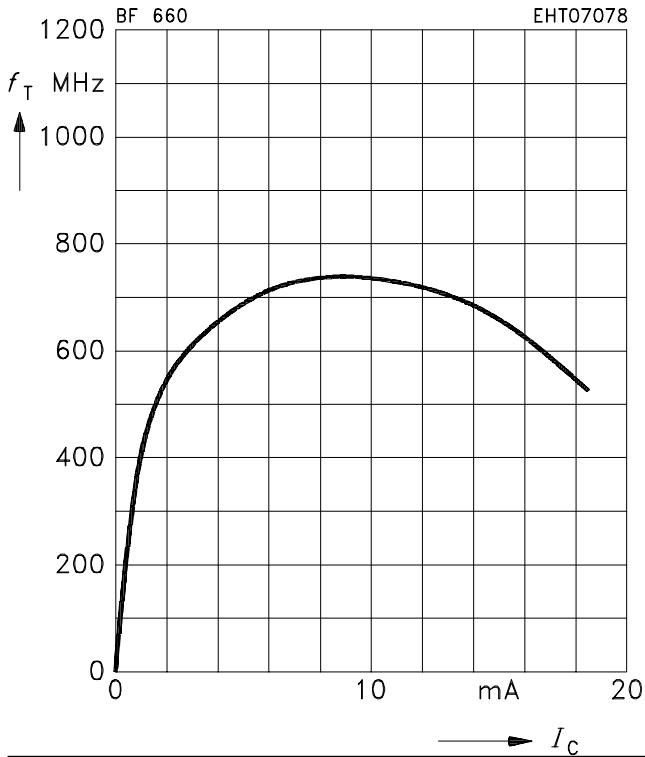
Permissible Pulse Load $P_{totmax}/P_{totDC} = f(t_p)$



Transition frequency $f_T = f(I_C)$

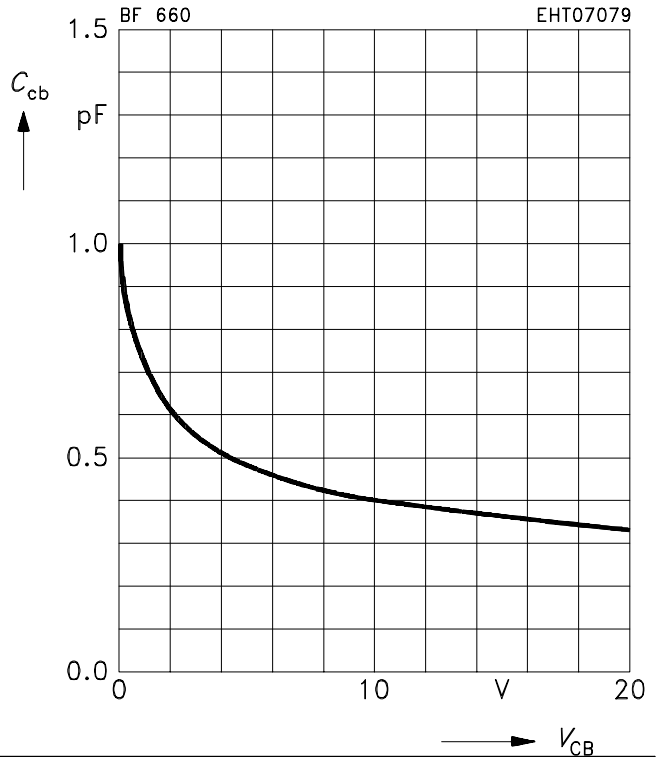
$f = 100\text{MHz}$

$V_{CE} = 10\text{V}$



Collector-base capacitance $C_{cb} = f(V_{CB})$

$V_{BE} = v_{be} = 0, f = 1\text{MHz}$



Package

