

Continental Device India Limited

An IS/ISO 9002 and IECQ Certified Manufacturer



NPN SILICON PLANAR RF TRANSISTOR



BF115

TO-72 Metal Can Package

ABSOLUTE MAXIMUM RATINGS (Ta=25°C unless specified otherwise)

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector Base Voltage	V_{CBO}	50	V
Collector Emitter Voltage	$V_{\sf CEO}$	30	V
Emitter Base Voltage	V_{EBO}	5	V
Collector Current	I_{C}	30	mA
Base Current Continuous	I_{B}	1	mA
Total Power Dissipation @ Ta=45°C	P_{D}	145	mW
Operating & Storage Junction	T_{j},T_{stg}	-55 to +175	°C
Temperature Range			
THERMAL RESISTANCE			
Junction to Ambient	$R_{\text{th(j-a)}}$	900	°C/W

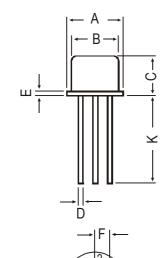
ELECTRICAL CHARACTERISTICS (Ta=25° C unless specified otherwise)

		VALUE			
SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
BV ₀₅₀ *	l _o =2mA l _o =0	30			V
020	v z	50			V
BV_{EBO}	$I_E=10\mu A, I_C=0$	5			V
I_{CBO}	V _{CB} =20V, I _E =0, Ta=175°C		0.5		μΑ
h_FE	$I_C=1$ mA, $V_{CE}=10$ V	48		167	
	I_C =20mA*, V_{CE} =2V	40			
$V_{BE(on)}$	$I_C=1$ mA, $V_{CE}=10$ V	600	700	740	mV
	I_C =20mA, V_{CE} = 2V*			1000	mV
f_T	I_C =1.0mA, V_{CE} =10V, f=100MHz		230		MHz
C_{re}	V _{CB} =10V,I _C =1mA,f=0.45MHz		0.65	8.0	pF
NF	V_{CE} =10V, I_{C} =1mA, Rg=300K Ω ,				
	f=200KHz		1.5		dB
	f=1MHz		1.2		dB
	BV _{CEO} * BV _{CBO} BV _{EBO} I _{CBO} h _{FE} V _{BE(on)}	$\begin{array}{llllllllllllllllllllllllllllllllllll$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	SYMBOL TEST CONDITION MIN TYP BV _{CEO} * I_C =2mA, I_B =0 30 30 BV _{CBO} I_C =10μA, I_C =0 50 50 BV _{EBO} I_E =10μA, I_C =0 5 0.5 I_{CBO} V_{CB} =20V, I_E =0, Ta=175°C 0.5 I_{FE} I_C =1mA, I_C =10V 48 48 I_C =20mA*, I_C =10V 600 700 I_C =20mA, I_C =10V 600 700 I_C =20mA, I_C =10V, I_C =100MHz 230 I_C =10V, I_C =1mA, I_C =10V, I_C =100MHz 0.65 I_C =10V, I_C =1mA, I_C =300KΩ, I_C =10V, I_C =1mA, I_C =300KΩ, I_C =10V, I_C =1mA, I_C =300KΩ, I_C =10V, I_C =1	SYMBOL TEST CONDITION MIN TYP MAX BV _{CEO} * I_{C} =2mA, I_{B} =0 30 30 BV _{CBO} I_{C} =10μA, I_{E} =0 50 50 BV _{EBO} I_{E} =10μA, I_{C} =0 5 0.5 I_{CBO} V_{CB} =20V, I_{E} =0, Ta=175°C 0.5 0.5 I_{FE} I_{C} =1mA, V_{CE} =10V 48 167 I_{C} =20mA*, V_{CE} =2V 40 700 740 I_{C} =20mA, V_{CE} =10V 600 700 740 I_{C} =20mA, V_{CE} =2V* 1000 1000 I_{C} =1.0mA, I_{C} =1mA, I_{C} =10V, I_{C} =1mA, I_{C} =100MHz 0.65 0.8 NF V_{CE} =10V, I_{C} =1mA, I_{C} =200KHz 1.5

Pulse Test: pulse Width ≤300µS, Duty Cycle≤2%

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PIN CONFIGURATION

- 1. EMITTER
- 2. BASE
- 3. COLLECTOR
- 4. CASE

	DIM	MIN.	MAX.
dimensions in mm.	Α	5.24	5.84
	В	4.52	4.95
	С	4.31	5.33
	D	0.40	0.53
	Е	_	0.76
	F	1.14	1.39
	G	2.28	2.97
	Н	0.91	1.17
	J	0.71	1.22
	K	12.70	_
All d	L	12 DEG	48 DEG

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
T0-72	1 K/Polybag	325 gm/1K pcs	3" x 7.5" x 7.5"	5K	17" x 15" x 13.5"	80K	32 kgs

Notes BF115

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Disclaimer

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BF115Rev040801