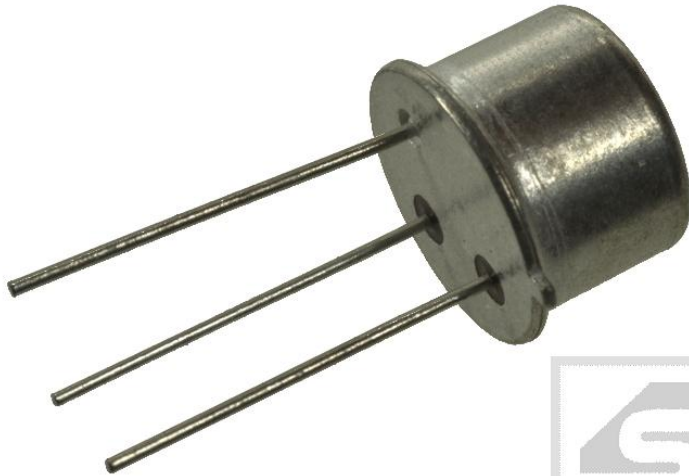




# TR BFW16A;TO39;tranzystor; NPN;w.cz.;300mA;25V;1.2GHz



## Dane techniczne:

Nazwa: BFW16A

Typ tranzystora: bipolarny

Kierunek przewodnictwa: NPN

Prąd kolektora: 300mA

Napięcie kolektor-emiter: 25V

Częstotliwość: 1.2GHz

Montaż: przewlekany(THT)

Obudowa: TO39

## NPN BFW16A

### N-P-N H.F. WIDEBAND TRANSISTOR

The BFW16A is NPN multi-emitter transistor in a TO-39 metal envelope, with the collector connected to the case. The transistor has extremely good intermodulation properties and a high power gain. It is a ruggedized version of the BFW16, which it succeeds.

It is primarily intended for :

- Final and driver stages of channel and band aerial amplifiers with high output power for bands I , II , III , IV , V (40-860 MHz).
- Final stage of the wideband vertical amplifier in high speed oscilloscopes.

#### ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings	Value	Unit
$V_{CEO}$	Collector-Emitter Voltage $I_B = 0$	25	V
$V_{CBOM}$	Collector-Base Voltage (open emitter ; peak value) $I_E = 0$	40	V
$V_{EBO}$	Emitter-Base Voltage $I_C = 0$	2	V
$V_{CERM}$	Collector-Emitter Voltage ( $R_{BE} \leq 50\Omega$ )	40	V
$I_C$	Collector Current	150	mA
$I_{CM}$	Collector Peak Current	300	mA
$P_t$	Total Power Dissipation @ $T_C = 125^\circ$	1.5	Watts

Symbol	Ratings	Value	Unit
$T_J$	Junction Temperature	200	$^\circ\text{C}$
$T_{Stg}$	Storage Temperature	-65 to +200	$^\circ\text{C}$

#### THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
$R_{thJa}$	Thermal Resistance, Junction to Ambient	250	K/W
$R_{thJmb}$	Thermal Resistance, Junction to Mounting Base	50	K/W
$R_{thJmb-h}$	Thermal Resistance, Junction to Mounting Base to heatsink	1.2	K/W

# NPN BFW16A

## ELECTRICAL CHARACTERISTICS

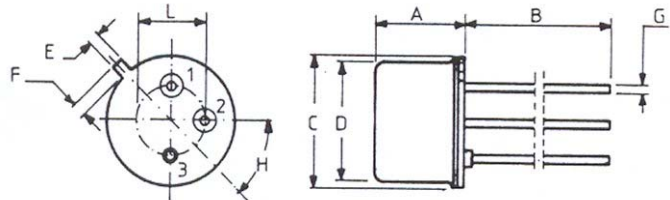
TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)	Min	Typ	Mx	Unit
$I_{CB0}$	Collector Cutoff Current	$I_E=0A, V_{CB}=20V; T_J=150^\circ C$	-	-	20	$\mu A$
$h_{FE}$	DC Current Gain (1)	$I_C=50mA, V_{CE}=5.0V$	25	-	-	-
		$I_C=150mA, V_{CE}=5.0V$	25	-	-	

Symbol	Ratings	Test Condition(s)Sec	Min	Typ	Mx	Unit	
$f_T$	Transition frequency	$V_{CE}=15V, I_C=150mA, f=500MHz$	-	1.2	-	GHz	
$C_C$	Collector capacitance at f=1MHz	$I_E=I_e=0; V_{CB}=15V$	-	-	4	pF	
$C_{re}$	Feedback capacitance at f=1MHz	$I_C=10mA; V_{CE}=15V; T_{amb}=25^\circ C$	-	1.7	-		
F	Noise figure at f= 200 MHz	$I_C=30mA; V_{CE}=15V; Z_S=75\Omega; T_{amb}=25^\circ C$	-	-	6	dB	
$G_P$	Power gain (not neutralized)	$I_C=70mA; V_{CE}=18V; T_{amb}=25^\circ C$	200 MHz	-	16	-	dB
			800 MHz	-	6.5	-	

## MECHANICAL DATA CASE TO-39

	DIMENSIONS			
	mm		inches	
	min	max	min	max
A	-	6.6	-	0.260
B	12.7	-	0.500	-
C	-	9.4	-	0.370
D	-	8.5	-	0.334
E	-	0.9	-	0.035
F	-	1.2	-	0.047
G	-	0.49	-	0.019
H	45° typ		45° typ	
L	5.08 typ		0.200 typ	



Pin 1 :	Emitter
Pin 2 :	Base
Pin 3 :	Collector

*Information furnished is believed to be accurate and reliable. However, CS assumes no responsibility for the consequences of use of such information nor for errors that could appear.*

Data are subject to change without notice.