

BF245A/BF245B/BF245C

N-Channel Amplifiers

- This device is designed for VHF/UHF amplifiers.
- Sourced from process 50.



G S D

TO-92

BF245A/BF245B/BF245C

Absolute Maximum Ratings $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
V_{DG}	Drain-Gate Voltage	30	V
V_{GS}	Gate-Source Voltage	30	V
I_{GF}	Forward Gate Current	10	mA
P_D	Total Device Dissipation @ $T_A=25^\circ\text{C}$ Derate above 25°C	350 2.8	mW mW/ $^\circ\text{C}$
T_J, T_{STG}	Operating and Storage Junction Temperature Range	- 55 ~ 150	$^\circ\text{C}$

Electrical Characteristics $T_C=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
Off Characteristics						
$V_{(BR)GSs}$	Gate-Source Breakdown Voltage	$V_{DS} = 0, I_G = 1\mu\text{A}$	30			V
V_{GS}	Gate-Source	$V_{DS} = 15\text{V}, I_D = 200\mu\text{A}$	0.4		2.2	V
	BF245A		1.6		3.8	
	BF245B		3.2		7.5	
	BF245C					
$V_{GS(off)}$	Gate-Source Cut-off Voltage	$V_{DS} = 15\text{V}, I_D = 10\text{nA}$	-0.5		-8	V
I_{GSS}	Gate Reverse Current	$V_{GS} = 20\text{V}, V_{DS} = 0$			5	nA
On Characteristics						
I_{DSS}	Zero-Gate Voltage Drain Current	$V_{GS} = 15\text{V}, V_{GS} = 0$	2		6.5	mA
	BF245A		6		15	
	BF245B		12		25	
	BF245C					
On Characteristics						
g_{fs}	Common Source Forward Transconductance	$V_{GS} = 15\text{V}, V_{GS} = 0, f = 1\text{KHz}$	3		6.5	$\text{m}\Omega$