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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Rev. A1, June 2003



## BF245A/BF245B/BF245C

# N-Channel Amplifiers • This device is designed for VHF/UHF amplifiers.

- Sourced from process 50.



## **Absolute Maximum Ratings** $T_a$ =25°C unless otherwise noted

Symbol	Parameter	Value	Units
V <sub>DG</sub>	Drain-Gate Voltage	30	V
V <sub>GS</sub>	Gate-Source Voltage	-30	V
I <sub>GF</sub>	Forward Gate Current	10	mA
P <sub>D</sub>	Total Device Dissipation @T <sub>A</sub> =25°C Derate above 25°C	350 2.8	mW mW/°C
T <sub>J,</sub> T <sub>STG</sub>	Operating and Storage Junction Temperature Range	- 55 ~ 150	°C

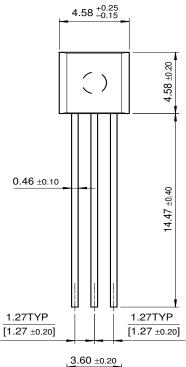
### **Electrical Characteristics** T<sub>a</sub>=25°C unless otherwise noted

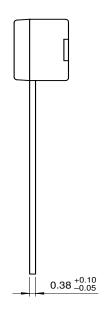
Symbol	Para	meter	Test Condition	Min.	Max.	Units
Off Chara	cteristics		·	•	•	
V <sub>(BR)GSS</sub>	Gate-Source Break	down Voltage	$V_{DS} = 0, I_{G} = 1\mu A$	-30		V
V <sub>GS</sub>	Gate-Source	BF245A BF245B BF245C	V <sub>DS</sub> = 15V, I <sub>D</sub> = 200μA	-0.4 -1.6 -3.2	-2.2 -3.8 -7.5	V
V <sub>GS</sub> (off)	Gate-Source Cut-off	Voltage	V <sub>DS</sub> = 15V, I <sub>D</sub> = 10nA	-0.5	-8	V
I <sub>GSS</sub>	Gate Reverse Curre	nt	$V_{GS} = -20V, V_{GS} = 0$		-5	nA
On Chara	cteristics		·	•	•	
I <sub>DSS</sub>	Zero-Gate Voltage D	Orain Current BF245A BF245B BF245C	V <sub>GS</sub> = 15V, V <sub>GS</sub> = 0	2 6 12	6.5 15 25	mA
On Chara	cteristics		·	•	•	•
9 <sub>fs</sub>	Common Source Fo Transconductance	rward	$V_{GS} = 15V, V_{GS} = 0, f = 1KHz$	3	6.5	mmhos

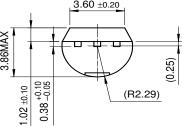
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# **Package Dimensions**

**TO-92** 







Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench <sup>®</sup>	SuperSOT™-6
$CROSSVOLT^{\text{TM}}$	FRFET™	MicroPak™	QFET™	SuperSOT™-8
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EcoSPARK™	GTO™	MSX™	QT Optoelectronics™	TinyLogic <sup>®</sup>
E <sup>2</sup> CMOS <sup>TM</sup>	HiSeC™	MSXPro™	Quiet Series™	TruTranslation™
EnSigna™	I <sup>2</sup> C <sup>TM</sup>	OCXTM	RapidConfigure™	UHC™
Across the board.	Around the world.™	OCXPro™	RapidConnect™	UltraFET <sup>®</sup>
The Power Franchise™		OPTOLOGIC <sup>®</sup>	SILENT SWITCHER®	VCX™
Programmable Active Droop™		OPTOPLANAR™	SMART START™	

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