

CentralTM Semiconductor Corp.

145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

BFT28
BFT28A
BFT28B
BFT28C

SILICON PNP HIGH VOLTAGE TRANSISTOR

JEDEC TO-39 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR BFT28 Series types are PNP Silicon High Voltage Transistors mounted in a hermetically sealed metal case designed for amplifier and switching applications where high breakdown voltage is required.

MAXIMUM RATINGS ($T_C=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL	BFT28	BFT28A	BFT28B	BFT28C	UNIT
Collector-Base Voltage	V_{CB0}	150	200	250	300	V
Collector-Emitter Voltage	V_{CER}	150	200	250	300	V
Collector-Emitter Voltage	V_{CEO}	100	150	200	250	V
Emitter-Base Voltage	V_{EBO}			4.0		V
Collector Current	I_C			1.0		A
Base Current	I_B			0.5		A
Power Dissipation	P_D			5.0		W
Operating and Storage Junction Temperature	T_J, T_{STG}			-65 TO +200		$^\circ\text{C}$
Thermal Resistance	θ_{JC}			35		$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_C=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	BFT28		BFT28A		BFT28B		BFT28C		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
I_{CB0}	$V_{CB}=50\text{V}$		1.0		-		-		-	μA
I_{CB0}	$V_{CB}=75\text{V}$		-		1.0		-		-	μA
I_{CB0}	$V_{CB}=150\text{V}$		-		-		5.0		5.0	μA
I_{EBO}	$V_{EB}=4.0$		100		100		100		100	μA
BV_{CEO}	$I_C=10\text{mA}$	100		150		200		250		V
BV_{CER}	$I_C=10\text{mA}$, $R_{BE}=100\Omega$	150		200		250		300		V
$V_{CE(SAT)}$	$I_C=10\text{mA}$, $I_B=1.0\text{mA}$		0.6		0.6		5.0		5.0	V
$V_{BE(SAT)}$	$I_C=30\text{mA}$, $I_B=3.0\text{mA}$		1.5		1.5		1.5		1.5	V
h_{FE}	$V_{CE}=10\text{V}$, $I_C=10\text{mA}$	20		20		20		20		
h_{fe}	$V_{CE}=10\text{V}$, $I_C=5.0\text{mA}$	25		25		25		25		
f_T	$V_{CE}=10\text{V}$, $I_C=30\text{mA}$, $f=5.0\text{MHz}$	25		25		25		25		MHz
C_{ob}	$V_{CB}=10\text{V}$, $f=1.0\text{MHz}$		15		15		15		15	pF
C_{ib}	$V_{EB}=5.0\text{V}$, $I_C=0$, $f=1.0\text{MHz}$		75		75		75		75	pF
$I_{s/b}$	$V_{CE}=80\text{V}$, $t_{pulse}=0.4\text{s (non-Rep)}$	62.5		62.5		62.5		62.5		mA