

D45C8 PNP Power Amplifier

• Sourced from process 5P.



1. Base 2. Collector 3. Emitter

Absolute Maximum Ratings T_a = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _{CEO}	Collector-Emitter Voltage	-60	V
I _C	Collector Current - Continuous	-4.0	А
T _J , T _{STG}	Operating and Storage Junction Temperature Range	-55 to +150	°C

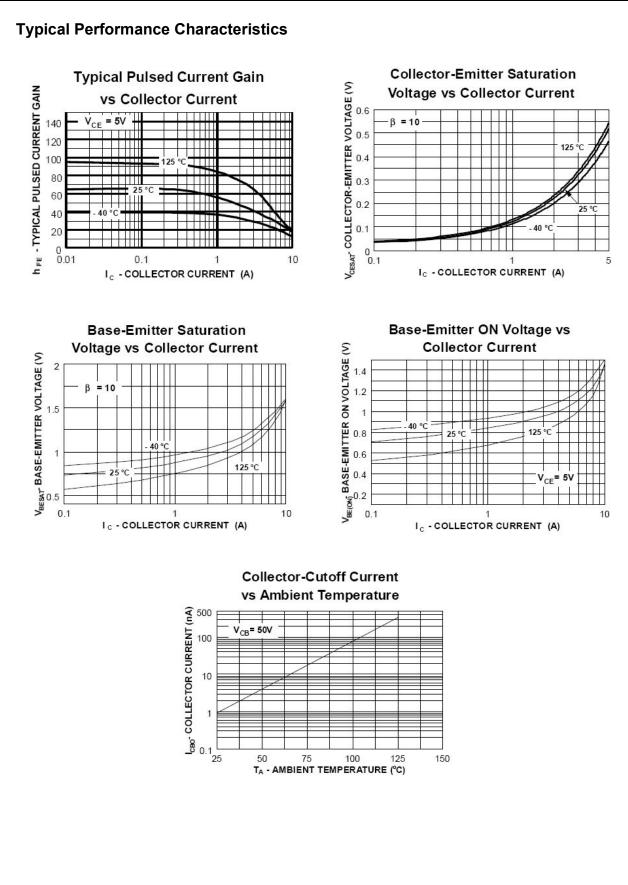
Electrical Characteristics T_a=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
Off Charac	teristics					
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -100mA, I _B = 0	-60			V
I _{CES}	Collector-Emitter-(Base)Short	V _{CE} = -70V, I _E = 0			-10	μA
I _{CEO}	Collector-Emitter-(Base)Open	V _{CE} = -55V, I _E = 0			-100	μA
I _{EBO}	Emitter-Base Current	V _{EB} = -5.0V, I _B = 0			-100	μA
On Charact	teristics *					
h _{FE}	DC Current Gain	$V_{CE} = -1V, I_{C} = -0.2A$ $V_{CE} = -1V, I_{C} = -2.0A$	40 20		120	
V _{CE (sat)}	Collector-Emitter Saturation Voltage	I _C = -1.0A,I _B = -50mA			-0.5	V
V _{BE (sat)}	Base-Emitter Saturation Voltage	I _C = -1.0A,I _B = -100mA			-1.3	V
	al Characteristics				•	
C _{ob}	Output Capacitance	V _{CB} = - 10V,f = 1.0MHz			125	pF
f _T	Current Gain Bandwidth Product	I _C = -20mA, V _{CE} = -4.0V	32			pF
t _{ON}	t _d , Delay Time t _r , Rise Time	I _C = -1.0A, I _{B1} = I _{B2} = -0.1A,		59 502		ns
t _{OFF}	$t_{\rm s}$, Storage Time $t_{\rm f}$, Fall Time	$V_{CC} = -30V$, tp = 25µs		474 59		ns

Thermal Characteristics $T_a=25^{\circ}C$ unless otherwise noted

Symbol	Parameter	Max.	Units
P _D	Total Device Dissipation Derate above 25°C	60 480	₩ mW/°C
$R_{ ext{ heta}JC}$	Thermal Resistance, Junction to Case	2.1	°C/W
R_{\thetaJA}	Thermal Resistance, Junction to Ambient	62.5	°C/W





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