

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}	T _{STG} Operating and Storage Junction Temperature Range		°C

Electrical Characteristics T_a=25°C unless otherwise noted

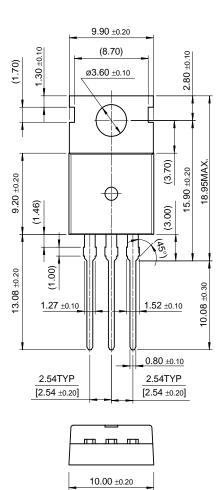
Symbol	Parameter	Test Condition	Min.	Max.	Units	
Off Charac	Off Characteristics					
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -100mA, I _B = 0	-60		V	
I _{CES}	Collector-Cutoff Current	V _{CB} = -70V, I _E = 0		-10	μΑ	
I _{EBO}	Emitter-Cutoff Current	V _{EB} = -5.0V, I _B = 0		-100	μΑ	
On Charac	On Characteristics *					
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	
Small Sign	Small Signal Characteristics					
f _T	Current Gain Bandwidth Product	I _C = -20mA, V _{CE} = -4.0V	32		pF	

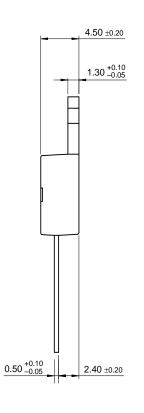
Thermal Characteristics T_a=25°C unless otherwise noted

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

Mechanical Dimensions

TO-220





Dimensions in Millimeters

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