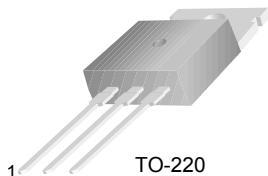


D45C8

PNP Power Amplifier

- Sourced from process 5P.



TO-220
1. Base 2. Collector 3. Emitter

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

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage	-60	V
I_C	Collector Current - Continuous	-4.0	A
T_J, T_{STG}	Operating and Storage Junction Temperature Range	-55 to +150	$^\circ\text{C}$

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

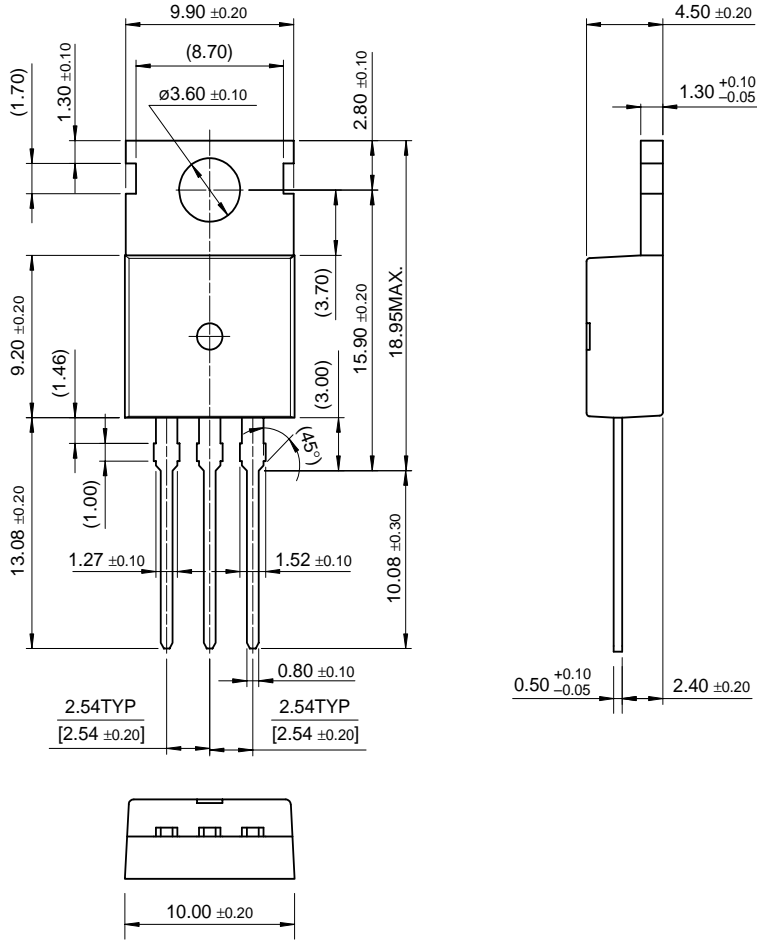
Symbol	Parameter	Test Condition	Min.	Max.	Units
Off Characteristics					
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -100\text{mA}, I_B = 0$	-60		V
I_{CES}	Collector-Cutoff Current	$V_{CB} = -70\text{V}, I_E = 0$		-10	μA
I_{EBO}	Emitter-Cutoff Current	$V_{EB} = -5.0\text{V}, I_B = 0$		-100	μA
On Characteristics *					
h_{FE}	DC Current Gain	$V_{CE} = -1\text{V}, I_C = -0.2\text{A}$ $V_{CE} = -1\text{V}, I_C = -2.0\text{A}$	40 20	120	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1.0\text{A}, I_B = -50\text{mA}$		-0.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = -1.0\text{A}, I_B = -100\text{mA}$		-1.3	V
Small Signal Characteristics					
f_T	Current Gain Bandwidth Product	$I_C = -20\text{mA}, V_{CE} = -4.0\text{V}$	32		pF

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

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

Mechanical Dimensions

TO-220



Dimensions in Millimeters

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EnSigna™	i-Lo™	MSXPro™	Quiet Series™	TINYOPTO™
FACT™	ImpliedDisconnect™	OCX™	RapidConfigure™	TruTranslation™
FACT Quiet Series™		OCXPro™	RapidConnect™	UHC™
Across the board. Around the world.™		OPTOLOGIC®	μSerDes™	UltraFET®
The Power Franchise®		OPTOPLANAR™	SILENT SWITCHER®	UniFET™
Programmable Active Droop™		PACMAN™	SMART START™	VCX™

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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

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