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[D45H2A](#)

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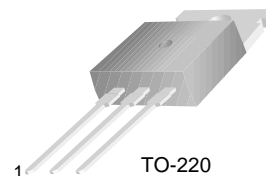
sales@integrated-circuit.com



D45H2A

PNP Power Amplifier

- This device is designed for power amplifier, regulator and switching circuits where speed is important.
- Sourced from process 5Q.



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

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

Symbol	Parameter	Value	Units
V_{CEO}	Collector-Emitter Voltage	30	V
I_C	Collector Current - Continuous	8.0	A
T_J, T_{STG}	Operating and Storage Junction Temperature Range	- 55 ~ 150	$^\circ\text{C}$

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

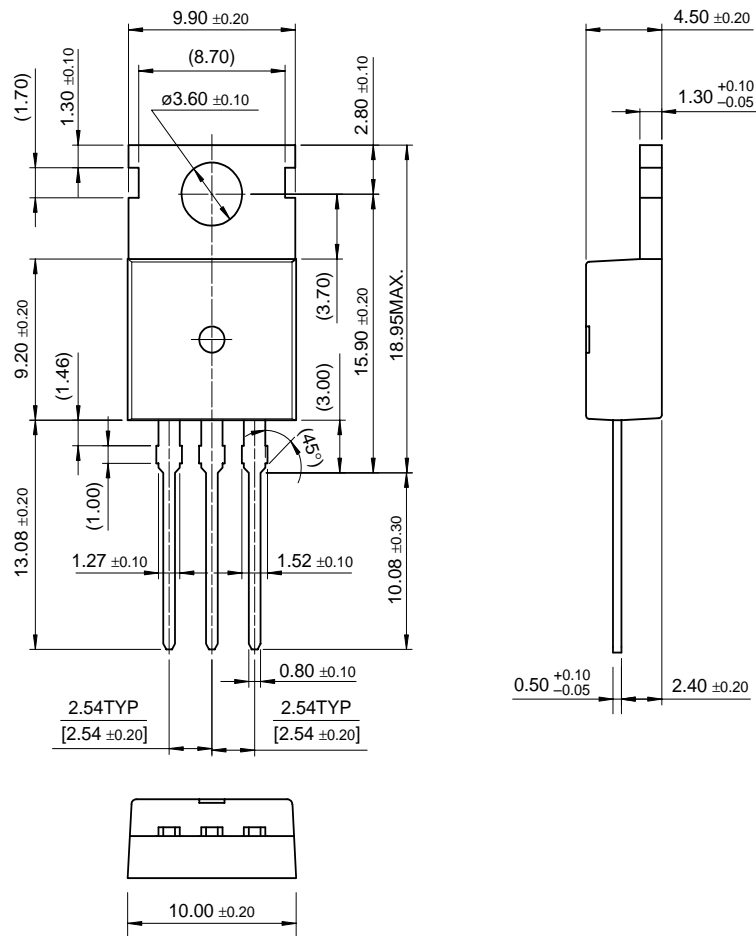
Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
Off Characteristics						
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = 100\text{mA}, I_B = 0$	30			V
I_{CBO}	Collector Cut-off Current	$V_{CB} = 60\text{V}, I_E = 0$			10	μA
I_{EBO}	Emitter Cut-off Current	$V_{EB} = 5\text{V}, I_C = 0$			100	μA
On Characteristics						
h_{FE}	DC Current Gain	$V_{CE} = 5\text{V}, I_C = 8\text{A}$ $V_{CE} = 5\text{V}, I_C = 10\text{A}$ $V_{CE} = 5\text{V}, I_C = 12\text{A}$	100 80 65			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 8\text{A}, I_B = 0.4\text{A}$			1	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C = 8\text{A}, I_B = 0.8\text{A}$			1.5	V
Small Signal Characteristics						
f_T	Current Gain Bandwidth Product	$V_{CE} = 10\text{V}, I_C = 500\text{mA}$	25			MHz

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	$^\circ\text{C}/\text{W}$

Package Dimensions

TO-220



Dimensions in Millimeters

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DenseTrench™	GTO™	Power247™	SuperSOT™-6	
DOME™	HiSeC™	PowerTrench®	SuperSOT™-8	
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