

D45H2A

PNP Power Amplifier

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



1. Base 2. Collector 3. Emitter

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

Symbol	Parameter	Value	Units
V _{CEO}	Collector-Emitter Voltage	30	V
I _C	Collector Current - Continuous	8.0	Α
T _J , T _{STG}	Operating and Storage Junction Temperature Range	- 55 ~ 150	°C

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

Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
Off Charact	Off Characteristics					
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 100mA, IB = 0	30			V
I _{CBO}	Collector Cut-off Current	V _{CB} = 60V, IE = 0			10	μΑ
I _{EBO}	Emitter Cut-off Current	V _{EB} = 5V, IC = 0			100	μΑ
On Characteristics						
h _{FE}	DC Current Gain	V _{CE} = 5V, I _C = 8A	100			
		$V_{CE} = 5V, I_{C} = 10A$	80			
		$V_{CE} = 5V, I_{C} = 12A$	65			
V _{CE} (sat)	Collector-Emitter Saturation Voltage	$I_C = 8A, I_B = 0.4A$			1	V
V _{BE} (sat)	Base-Emitter Saturation Voltage	I _C = 8A, I _B = 0.8A			1.5	V
Small Signal Characteristics						
f _T	Current Gain Bandwidth Product	V _{CE} = 10V, I _C = 500mA	25			MHz

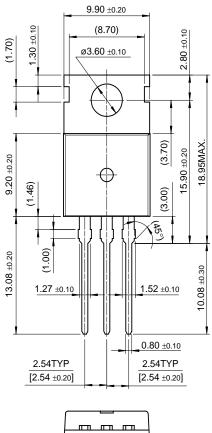
Thermal Characteristics $\rm T_A=25^{\circ}C$ unless otherwise noted

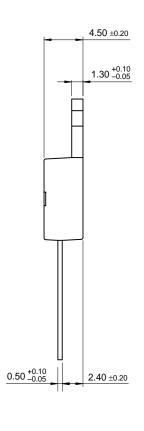
Symbol	Parameter	Max.	Units
P _D	Total Device Dissipation	60	W
	Derate above 25°C	480	mW/°C
$R_{\theta JC}$	Thermal Resistance, Junction to Case 2		°C/W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	62.5	°C/W

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Package Demensions

TO-220





10.00 ±0.20

Dimensions in Millimeters

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