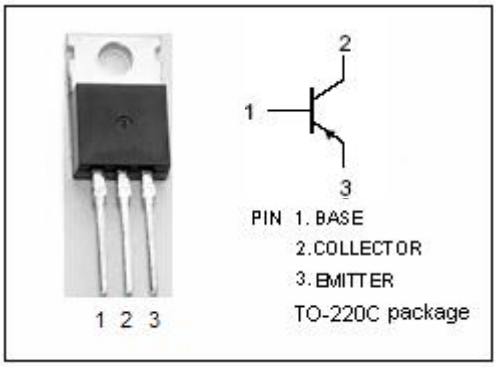
isc Silicon PNP Power Transistors D45H10

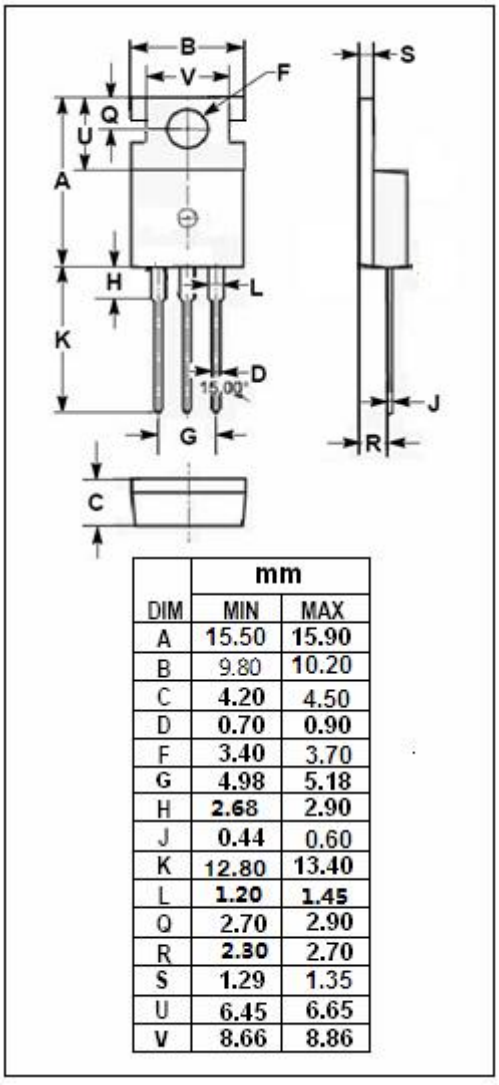
DESCRIPTION

- Low Saturation Voltage
- Fast Switching Speeds
- Complement to Type D44H10
- Minimum Lot-to-Lot variations for robust device performance and reliable operation



APPLICATIONS

- Designed for general pourpose power amplification and switching such as output or driver stages in applications such as switching regulators,converters and power amplifier.



DIM	mm MIN	MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CEO}	Collector-Emitter Voltage	-80	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-10	A
I_{CM}	Collector Current-Peak	-20	A
P_C	Collector Power Dissipation @T_C=25℃	-50	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance, Junction to Case	2.5	℃/W
$R_{th\ j\text{-}a}$	Thermal Resistance,Junction to Ambient	75	℃/W

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -8A ;I_B= -0.8 A			-1	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= -8A ;I_B= -0.8 A			-1.5	V
I_{CES}	Collector Cutoff Current	V_{CE}=Rated V_{CEO};			-10	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -5V; I_C= 0			-100	μA
h_{FE-1}	DC Current Gain	I_C= -2A ; V_{CE}= -1V	35			
h_{FE-2}	DC Current Gain	I_C= -4A ; V_{CE}= -1V	20			
C_{OB}	Output Capacitance	V_{CB}= -10V,f= 0.1MHz		230		pF
f_T	Current-Gain—Bandwidth Product	I_C=-0.5A;V_{CE}=-10V;f_{test}=20MHz	30			MHz
Switching Times						
t_s	Storage Time	I_C= -5A; I_{B1}= -I_{B2}= -0.5A V_{CC}= 20V		0.5		μs
t_f	Fall Time			0.10		μs

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