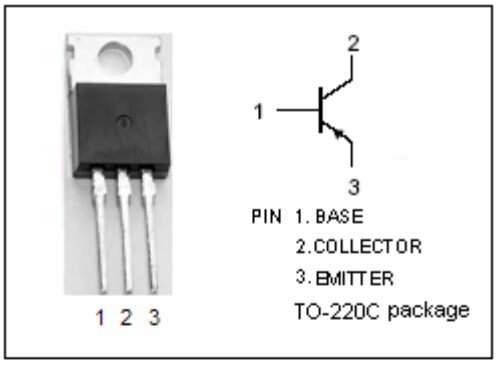
isc Silicon PNP Power Transistors D45H Series

DESCRIPTION

- Low Saturation Voltage
- Fast Switching Speeds
- Complement to Type D44H Series



APPLICATIONS

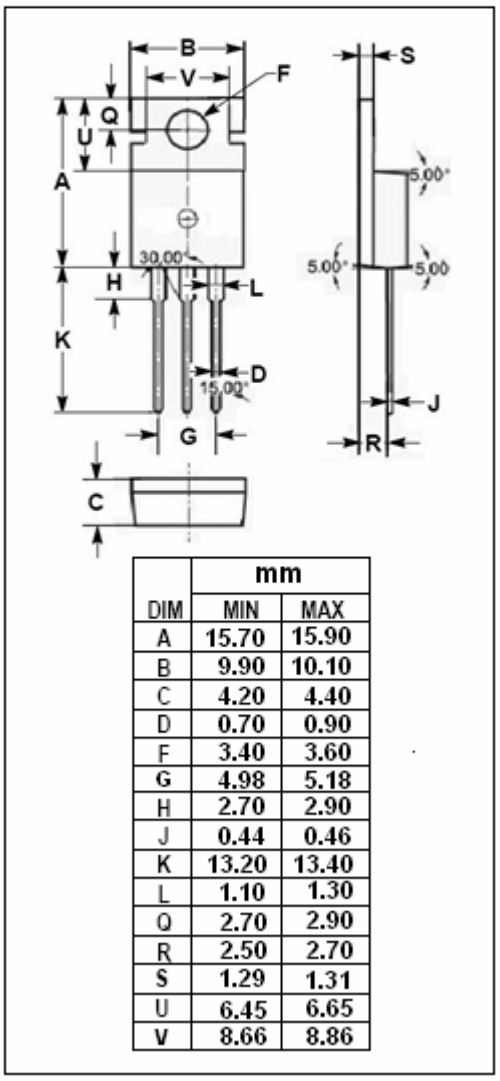
- Designed for general pourpose power amplification and switching such as output or driver stages in applications such as switching regulators,converters and power amplifier.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER		VALUE	UNIT
V_{CEO}	Collector-Emitter Voltage	D45H8	-60	V
		D45H10,11	-80	
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



DIM	mm MIN	MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
F	3.40	3.60
G	4.98	5.18
H	2.70	2.90
J	0.44	0.46
K	13.20	13.40
L	1.10	1.30
Q	2.70	2.90
R	2.50	2.70
S	1.29	1.31
U	6.45	6.65
V	8.66	8.86

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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	D44H10	I_C= -8A ;I_B= -0.8 A			-1	V
		D44H8,11	I_C= -8A ;I_B= -0.4 A				
$V_{BE(sat)}$	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	D44H10	I_C= -2A ; V_{CE}= -1V	35			
		D44H8,11		60			
h_{FE-2}	DC Current Gain	D44H10	I_C= -4A ; V_{CE}= -1V	20			
		D44H8,11		40			
C_{OB}	Output Capacitance		V_{CB}= -10V,f= 0.1MHz		130		pF
f_T	Current-Gain—Bandwidth Product		I_C=-0.5A;V_{CE}=-10V;f_{test}=20MHz		50		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				0.14		μs

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