D45H5
D45H8 \ D45H11

PNP SILICON POWER TRANSISTORS

- STM PREFERRED SALESTYPES
- LOW COLLECTOR-EMITTER SATURATION VOLTAGE
- FAST SWITCHING SPEED

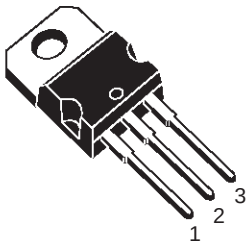
APPLICATIONS
- GENERAL PURPOSE SWITCHING
- GENERAL PURPOSE SWITCHING AND AMPLIFIER

DESCRIPTION

The D45H5, D45H8 and D45H11 are silicon multiepitaxial planar PNP transistors mounted in Jedec TO-220 plastic package.

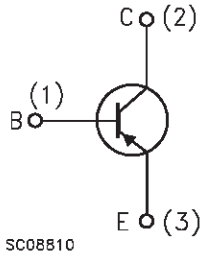
They are inteded for various switching and general purpose applications.

D45H8, D45H11 are complementary with D44H8, D44H11.



TO-220

INTERNAL SCHEMATIC DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value			Unit
		D45H5	D45H8	D45H11	
V_{CEO}	Collector-Emitter Voltage (I_B = 0)	-45	-60	-80	V
V_{EBO}	Emitter-Base Voltage (I_C = 0)	-5			V
I_C	Collector Current	-10			A
I_{CM}	Collector Peak Current	-20			A
I_B	Base Current	-5			A
P_{tot}	Total Dissipation at $T_c \leq 25\ ^oC$	50			W
T_{stg}	Storage Temperature	-65 to 150			^oC
T_j	Max. Operating Junction Temperature	150			^oC

THERMAL DATA

$R_{thj\text{-}case}$	Thermal Resistance Junction-case Max	2.5	$^oC/W$

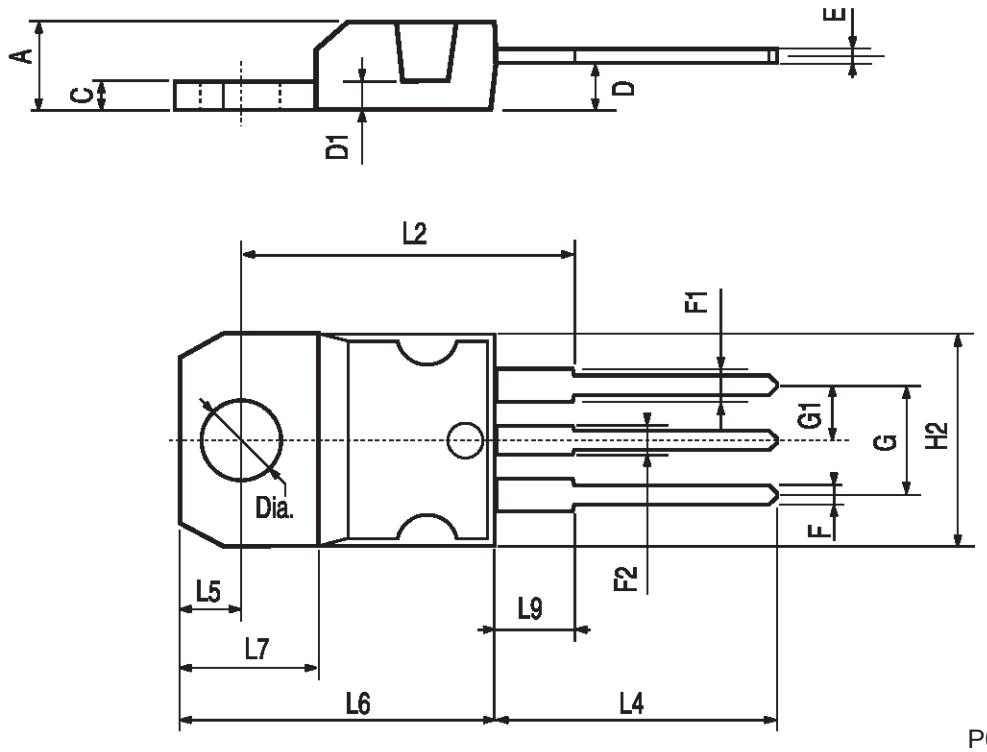
ELECTRICAL CHARACTERISTICS (T_{case} = 25 ^oC unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cut-off Current (I_E = 0)	V_{CB} = rated V_{CEO}			-10	µA
I_{EBO}	Emitter Cut-off Current (I_C = 0)	V_{EB} = -5V			-100	µA
$V_{CEO(sus)}$*	Collector-Emitter Sustaining Voltage	I_C = -100 mA for **D45H5** for **D45H8** for **D45H11**	 -45 -60 -80			 V V
$V_{CE(sat)}$*	Collector-Emitter Saturation Voltage	I_C = -8 A I_B = -0.4 A I_C = -8 A I_B = -0.8 A			-1 -1	V V
$V_{BE(sat)}$*	Base-Emitter Saturation Voltage	I_C = -8 A I_B = -0.8 A			-1.5	V
h_{FE}*	DC Current Gain	I_C = -2 A V_{CE} = -1 V I_C = -4 A V_{CE} = -1 V	60 40	120 70		

* Pulsed: Pulse duration = 300 µs, duty cycle ≤ 2 %

TO-220 MECHANICAL DATA

DIM.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A	4.40		4.60	0.173		0.181
C	1.23		1.32	0.048		0.051
D	2.40		2.72	0.094		0.107
D1		1.27			0.050	
E	0.49		0.70	0.019		0.027
F	0.61		0.88	0.024		0.034
F1	1.14		1.70	0.044		0.067
F2	1.14		1.70	0.044		0.067
G	4.95		5.15	0.194		0.203
G1	2.4		2.7	0.094		0.106
H2	10.0		10.40	0.393		0.409
L2		16.4			0.645	
L4	13.0		14.0	0.511		0.551
L5	2.65		2.95	0.104		0.116
L6	15.25		15.75	0.600		0.620
L7	6.2		6.6	0.244		0.260
L9	3.5		3.93	0.137		0.154
DIA.	3.75		3.85	0.147		0.151



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