

isc Silicon NPN Power Transistor

D44H11

DESCRIPTION

- Low Collector-Emitter Saturation Voltage
 : V_{CE(sat})= 1.0V(Max)@ I_C = 8A
- Fast Switching Speeds
- Complement to Type D45H11
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

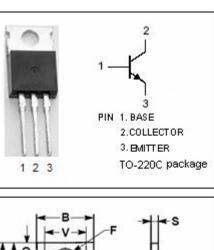
• Designed for general purpose power amplification and switching such as output or driver stages in applications such as switching regulators, converters and power amplifier.

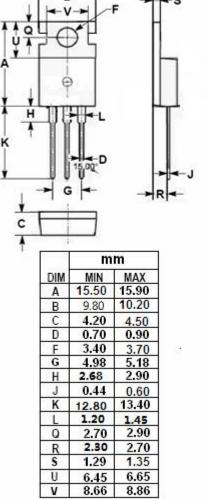
SYMBOL	PARAMETER	VALUE	UNIT				
V _{CEO}	Collector-Emitter Voltage	80	V				
V _{EBO}	Emitter-Base Voltage	5	V				
lc	Collector Current-Continuous	10	A				
I _{CM}	Collector Current-Peak	20	A				
Pc	Collector Power Dissipation @Tc=25°C	50	W				
Tj	Junction Temperature	-55~150	°C				
T _{stg}	Storage Temperature Range	-55~150	°C				

Absolute maximum ratings(Ta=25℃)

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT	
R _{th j-c}	Thermal Resistance, Junction to Case	2.5	°C/W	
R _{th j-a}	Thermal Resistance, Junction to Ambient	75	°C/W	







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ELECTRICAL CHARACTERISTICS

$T_c=25^{\circ}C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	ТҮР	MAX	UNIT
V _{CE(sat)}	Collector-EmitterSaturation Voltage	I _C = 8A ;I _B = 0.4 A			1.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 8A ;I _B = 0.8 A			1.5	V
ICES	Collector Cutoff Current	V _{CE} =Rated V _{CEO} ; V _{BE} = 0			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	60			
h _{FE-2}	DC Current Gain	Ic= 4A ; V _{CE} = 1V	40			
Сов	Output Capacitance	V _{CB} = 10V,f= 1.0MHz		130		pF
f⊤	Current-Gain—Bandwidth Product	I _C =0.5A;V _{CE} = 10V;f _{test} =20MHz		50		MHz

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