

isc Silicon NPN Power Transistor

DESCRIPTION

- DC Current Gain-
 - : h_{FE} = 30-150@ I_C= 2A
- · Collector-Emitter Sustaining Voltage-
 - : V_{CEO(SUS)}= 70V(Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

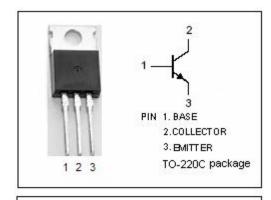
 Designed for use in general-purpose amplifier and switching applications

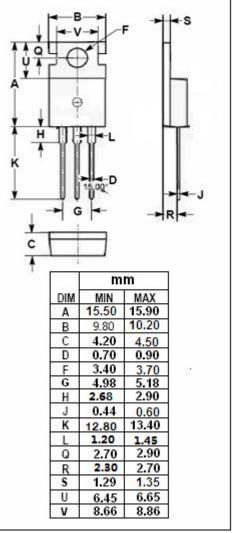
ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	80	V
V _{CEO}	Collector-Emitter Voltage	70	V
V _{EBO}	Emitter-Base Voltage	5	٧
Ic	Collector Current-Continuous	7	Α
Ісм	Collector Current-Peak	10	Α
I _B	Base Current	3	Α
Pc	Collector Power Dissipation @ T _c =25°C	40	
TJ	Junction Temperature	150	$^{\circ}$
T _{stg}	Storage Temperature Range	-65~150	$^{\circ}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	3.125	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient		°C/W







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2N6293

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA ;I _B = 0	70		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 7A; I _B = 3A		3.5	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = 7A; V _{CE} = 4V		3.0	V
I _{CEX}	Collector Cutoff Current	V _{CE} = 80V; V _{BE(off)} = 1.5V V _{CE} = 70V; V _{BE(off)} = 1.5V; T _C = 150 °C		0.1 2.0	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = 60V;I _B = 0		1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0		1.0	mA
h _{FE-1}	DC Current Gain	I _C = 2A; V _{CE} = 4V	30	150	
h _{FE-2}	DC Current Gain	I _C = 7A; V _{CE} = 4V	2.3		
Сов	Output Capacitance	I _E = 0 ; V _{CB} = 10V; f _{test} = 1MHz		250	pF
f⊤	Current-Gain—Bandwidth Product	I _C = 0.5A ; V _{CE} = 4V; f _{test} = 1MHz	10		MHz

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