

isc Silicon PNP Darlington Power Transistor

TIP135

DESCRIPTION

- High DC Current Gain-: h_{FE} = 1000(Min)@ I_C= -4A
- Collector-Emitter Sustaining Voltage-
 - : $V_{CEO(SUS)}$ = -60V(Min)
- Low Collector-Emitter Saturation Voltage-
- : V_{CE(sat)} = -2.0V(Max)@ I_C= -4A
- Complement to Type TIP130
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

• Designed for general-purpose amplifier and low-speed switching applications

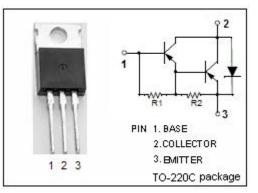
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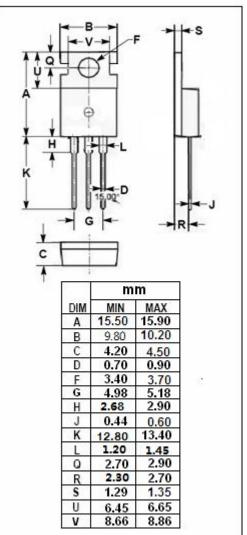
ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	-60	V
V _{CEO}	Collector-Emitter Voltage	-60	V
V _{EBO}	Emitter-Base Voltage	-5	V
Ic	Collector Current-Continuous	-8	А
Ісм	Collector Current-Peak	-12	А
I _B	Base Current- Continuous	-0.3	А
Pc	Collector Power Dissipation @T _c =25℃	70	10/
	Collector Power Dissipation @Ta=25℃	2	W
Tj	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.785	°C/W
Rth j-a	Thermal Resistance, Junction to Ambient	63.5	°C/W





isc website: <u>www.iscsemi.com</u>



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = -30mA, I _B = 0	-60		V
V _{CE(sat)} -1	Collector-Emitter Saturation Voltage	I _C = -4A; I _B = -16mA		-2.0	V
V _{CE(sat)-2}	Collector-Emitter Saturation Voltage	Ic= -6A, I _B = -30mA		-3.0	V
VBE(on)	Base-Emitter On Voltage	I _C = -4A; V _{CE} = -4V		-2.5	V
I _{СВО}	Collector Cutoff Current	V _{CB} = -60V, I _E = 0		-0.2	mA
I _{CEO}	Collector Cutoff Current	V _{CE} = -30V, I _B = 0		-0.5	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0		-5	mA
h _{FE-1}	DC Current Gain	I _C = -1A; V _{CE} = -4V	500		
h _{FE-2}	DC Current Gain	I _C = -4A; V _{CE} = -4V	1000	15000	

NOTICE:

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2