

isc Silicon PNP Darlington Power Transistor

2N6668

DESCRIPTION

- High DC Current Gain-
: $h_{FE} = 1000(\text{Min}) @ I_C = -5A$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(\text{SUS})} = -80V(\text{Min})$
- Low Collector-Emitter Saturation Voltage-
: $V_{CE(\text{sat})} = -2.0V(\text{Max}) @ I_C = -5A$
- Complement to Type 2N6388

APPLICATIONS

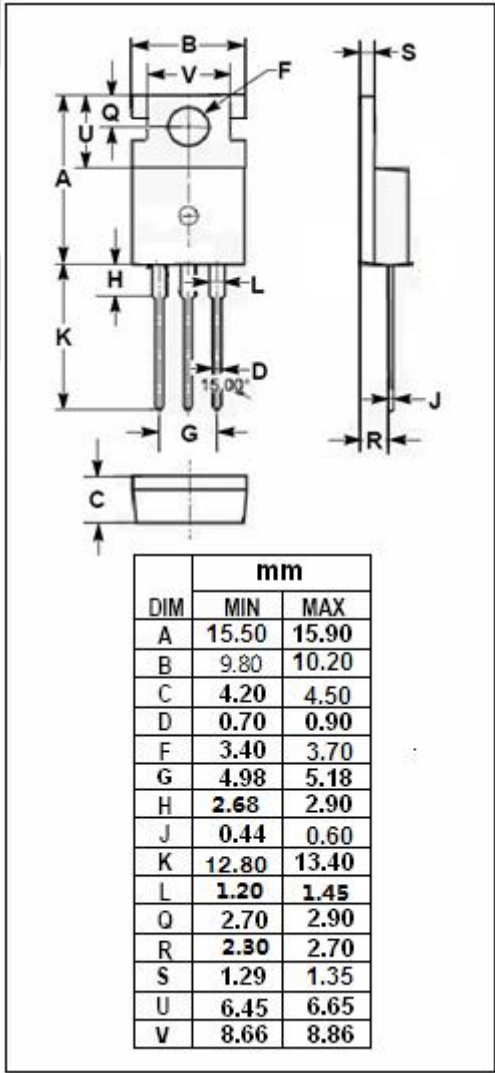
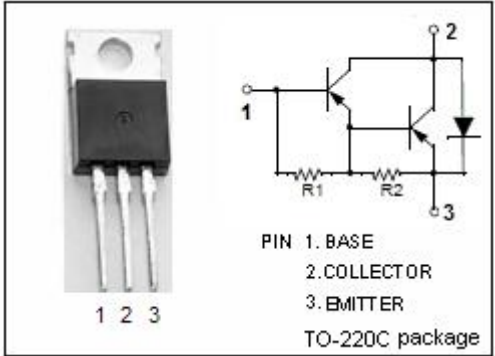
- Designed for general purpose amplifier and low speed switching applications.

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	-80	V
V _{CEO}	Collector-Emitter Voltage	-80	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current-Continuous	-10	A
I _{CM}	Collector Current-Peak	-15	A
I _B	Base Current-DC	-250	mA
P _C	Collector Power Dissipation T _C =25°C	65	W
	Collector Power Dissipation T _a =25°C	2	
T _j	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	1.92	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient	62.5	°C/W



isc Silicon PNP Darlington Power Transistor**2N6668****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-Emitter Sustaining Voltage	I _C = -50mA, I _B = 0	-80			V
V _{CE(sat)-1}	Collector-Emitter Saturation Voltage	I _C = -5A, I _B = -10mA			-2.0	V
V _{CE(sat)-2}	Collector-Emitter Saturation voltage	I _C = -10A, I _B = -100mA			-3.0	V
V _{BE(on)-1}	Base-Emitter On Voltage	I _C = -5A ; V _{CE} = -3V			-2.8	V
V _{BE(on)-2}	Base-Emitter On Voltage	I _C = -10A ; V _{CE} = -3V			-4.5	V
I _{CEO}	Collector Cutoff Current	V _{CE} = -80V, I _B = 0			-1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -5V; I _C = 0			-5	mA
h _{FE-1}	DC Current Gain	I _C = -5A ; V _{CE} = -3V	1000			
h _{FE-2}	DC Current Gain	I _C = -10A ; V _{CE} = -3V	100			
C _{OB}	Output Capacitance	I _E = 0; V _{CB} = -10V, f _{test} = 1MHz			200	pF