

isc Silicon PNP Darlington Power Transistor

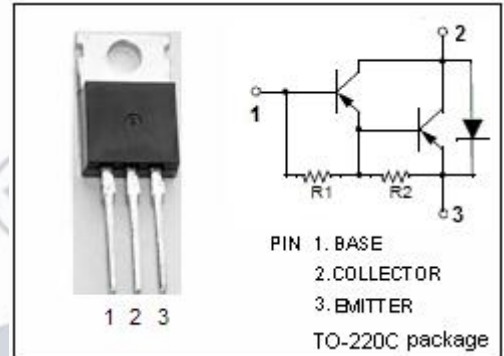
2N6667

DESCRIPTION

- High DC Current Gain-
: $h_{FE} = 1000(\text{Min})@ I_C = -5\text{A}$
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(\text{SUS})} = -60\text{V}(\text{Min})$
- Low Collector-Emitter Saturation Voltage-
: $V_{CE(\text{sat})} = -2.0\text{V}(\text{Max})@ I_C = -5\text{A}$
- Complement to Type 2N6387

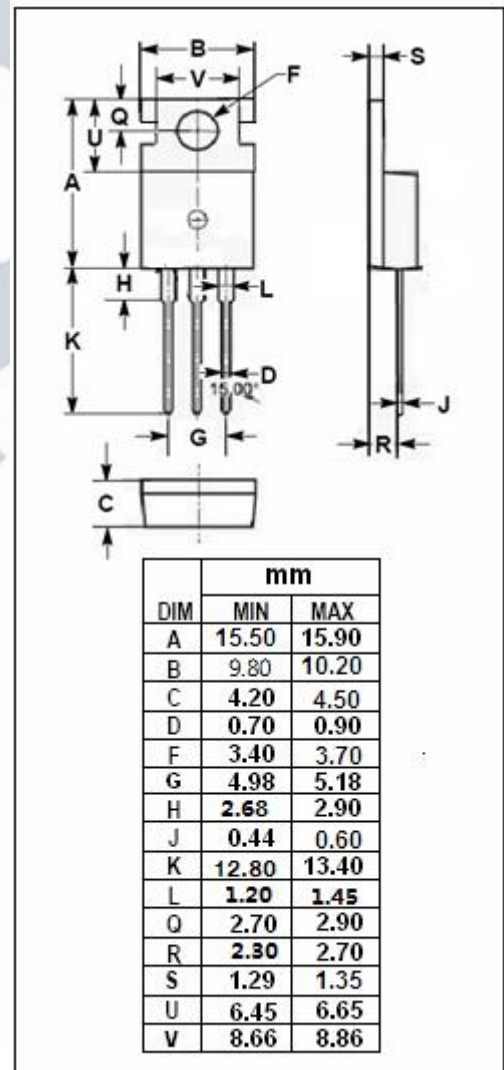
APPLICATIONS

- 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	-60	V
V _{CEO}	Collector-Emitter Voltage	-60	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

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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C = -50\text{mA}$, $I_B = 0$	-60			V
$V_{CE(sat)-1}$	Collector-Emitter Saturation Voltage	$I_C = -5\text{A}$, $I_B = -10\text{mA}$			-2.0	V
$V_{CE(sat)-2}$	Collector-Emitter Saturation voltage	$I_C = -10\text{A}$, $I_B = -100\text{mA}$			-3.0	V
$V_{BE(on)-1}$	Base-Emitter On Voltage	$I_C = -5\text{A}$; $V_{CE} = -3\text{V}$			-2.8	V
$V_{BE(on)-2}$	Base-Emitter On Voltage	$I_C = -10\text{A}$; $V_{CE} = -3\text{V}$			-4.5	V
I_{CEO}	Collector Cutoff Current	$V_{CE} = -60\text{V}$, $I_B = 0$			-1	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5\text{V}$; $I_C = 0$			-5	mA
h_{FE-1}	DC Current Gain	$I_C = -5\text{A}$; $V_{CE} = -3\text{V}$	1000			
h_{FE-2}	DC Current Gain	$I_C = -10\text{A}$; $V_{CE} = -3\text{V}$	100			
C_{OB}	Output Capacitance	$I_E = 0$; $V_{CB} = -10\text{V}$, $f_{test} = 1\text{MHz}$			200	pF