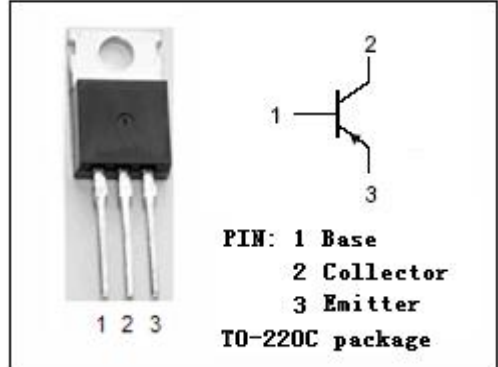


isc Silicon PNP Power Transistor
BD277
DESCRIPTION

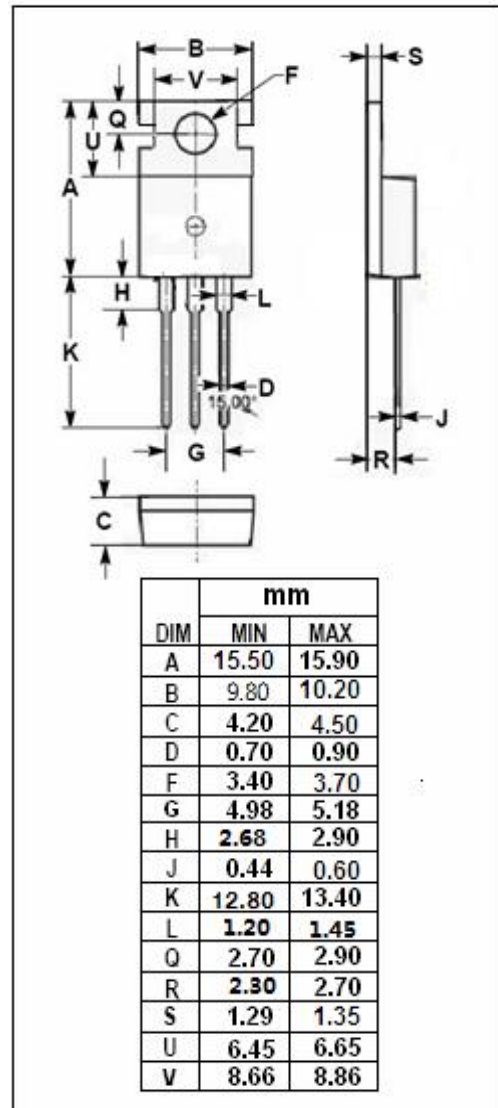
- Wide Area of Safe Operation
- Low Saturation Voltage-
- High Power Dissipation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for use in series regulators and shunt regulators.


ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	Collector-Base Voltage	-45	V
V _{CEO}	Collector-Emitter Voltage	-45	V
V _{EBO}	Emitter-Base Voltage	-4	V
I _c	Collector Current-Continuous	-7	A
I _b	Base Current	-3	A
P _c	Collector Power Dissipation @ T _c =25°C	70	W
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	1.78	°C/W
R _{th j-a}	Thermal Resistance, Junction to Ambient	70	°C/W

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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = -30\text{mA}; I_B = 0$	-45		V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -1.75\text{A}; I_B = -0.1\text{A}$		-0.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -1.75\text{A}; V_{CE} = -2\text{V}$		-1.2	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -45\text{V}; I_E = 0$		-0.1	mA
		$V_{CB} = -40\text{V}; I_E = 0; T_C = 150^{\circ}\text{C}$		-2.0	
I_{CEO}	Collector Cutoff Current	$V_{CE} = -30\text{V}; I_B = 0$		-1.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -4\text{V}; I_C = 0$		-1.0	mA
h_{FE}	DC Current Gain	$I_C = -1.75\text{A}; V_{CE} = -2\text{V}$	30	150	
f_T	Current-Gain—Bandwidth Product	$I_C = -0.5\text{A}; V_{CE} = -4\text{V}$	10		MHz

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