

Silicon PNP Power Transistor

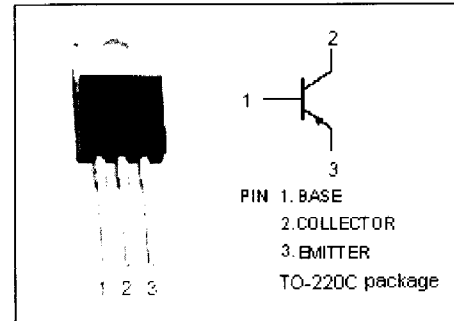
BD277

DESCRIPTION

- Wide Area of Safe Operation
- Low Saturation Voltage-
- High Power Dissipation

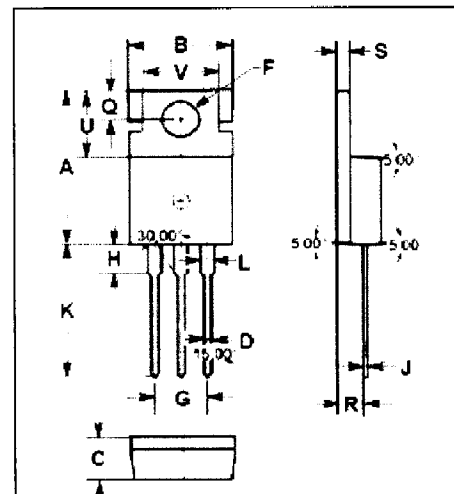
APPLICATIONS

- Designed for use in series regulators and shunt regulators.



ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	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

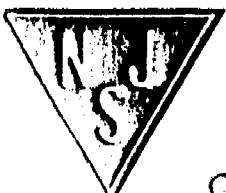


DIM	mm	
	MIN	MAX
A	15.70	15.90
B	9.90	10.10
C	4.20	4.40
D	0.70	0.90
F	3.40	3.60
G	4.98	5.18
H	2.70	2.90
J	0.44	0.46
K	13.20	13.40
L	1.10	1.30
Q	2.70	2.90
R	2.50	2.70
S	1.29	1.31
U	6.45	6.65
V	8.66	8.86

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	$I_C = -0.1\text{A}; I_B = 0$	-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