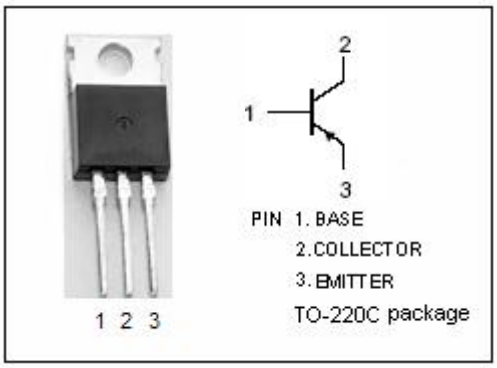
isc Silicon PNP Power Transistor — 2SA1077

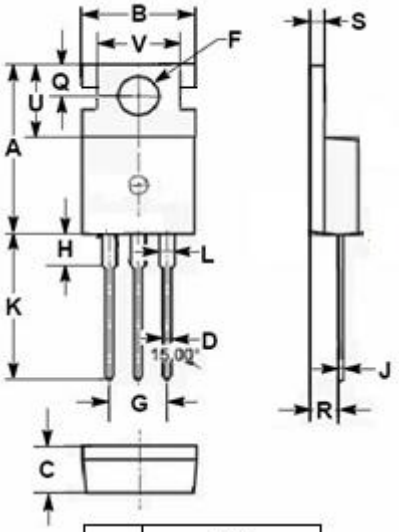


DESCRIPTION

- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= -120V(Min.)
- Fast Switching Speed
- Wide Area of Safe Operation
- Complement to Type 2SC2527
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High frequency power amplifiers
- Audio power amplifiers
- Switching regulators
- DC-DC converters



DIM	mm MIN	mm MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-120	V
V_{CEO}	Collector-Emitter Voltage	-120	V
V_{EBO}	Emitter-Base Voltage	-7.0	V
I_C	Collector Current-Continuous	-10	A
P_C	Collector Power Dissipation @T_C=25℃	60	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-65~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= -1mA; R_{BE}= ∞	-120			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	I_C= -50 μA; I_E= 0	-120			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= -50 μA; I_C= 0	-7			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= -5A; I_B= -0.5A			-1.8	V
$V_{BE(on)}$	Base to Emitter Voltage	V_{CE}= -5V; I_C= 5A			-1.7	V
I_{CBO}	Collector Cutoff Current	V_{CB}= -120V; I_E= 0			-50	μA
I_{CEO}	Collector Cutoff Current	V_{CE}= -120V; I_B= 0			-1.0	mA
I_{EBO}	Emitter Cutoff Current	V_{EB}= -7V; I_C= 0			-50	μA
h_{FE-1}	DC Current Gain	I_C= -1A; V_{CE}= -5V	60		200	
h_{FE-2}	DC Current Gain	I_C= -5A; V_{CE}= -5V	40			