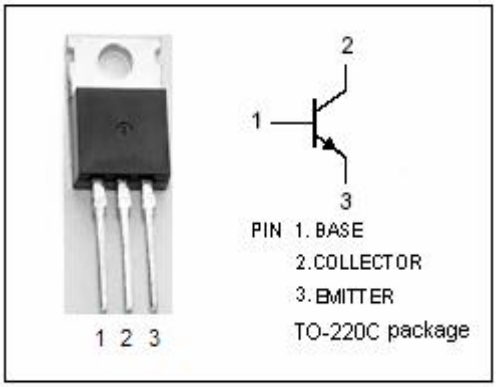
isc Silicon NPN Power Transistor — 2SC2275

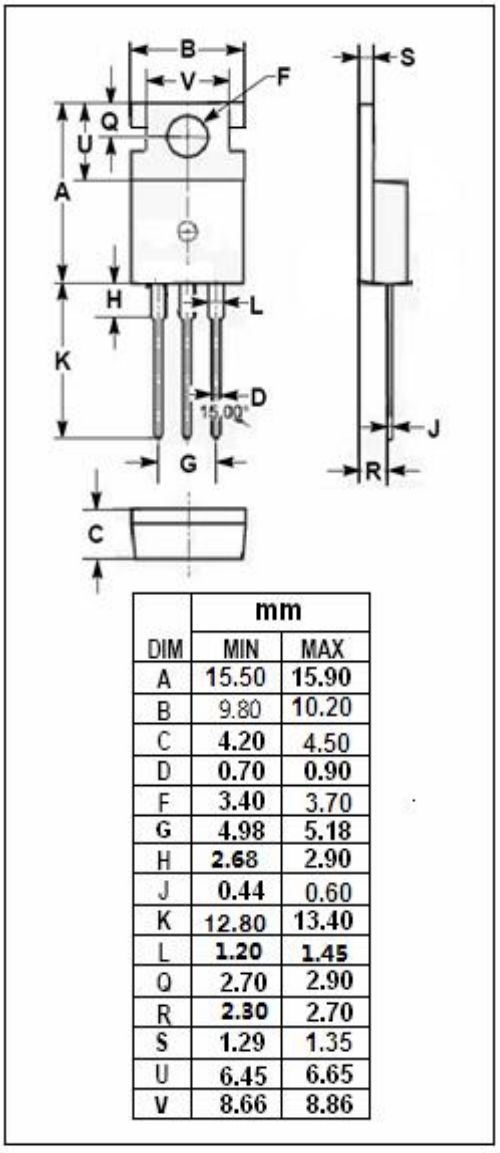


DESCRIPTION

- Collector-Emitter Breakdown Voltage
  : $V_{(BR)CEO}$= 120V(Min)
- Good Linearity of h_{FE}
- Complement to Type 2SA985
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Audio frequency power amplifier applications
- High frequency power amplifier applications



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(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	120	V
V_{CEO}	Collector-Emitter Voltage	120	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	1.5	A
I_{CM}	Collector Current-Peak	3.0	A
I_B	Base Current-Continuous	0.3	A
P_C	Total Power Dissipation @ T_a=25℃	1.5	W
	Total Power Dissipation @ T_C=25℃	25	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-55~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 1A; I_B= 0.1A			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	I_C= 1A; I_B= 0.1A			1.5	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 120V ; I_E= 0			1.0	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 3V; I_C= 0			1.0	μA
h_{FE-1}	DC Current Gain	I_C= 5mA ; V_{CE}= 5V	35			
h_{FE-2}	DC Current Gain	I_C= 0.3A ; V_{CE}= 5V	60		320	
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 10V; f_{test}= 1MHz		19		pF
f_T	Current-Gain—Bandwidth Product	I_C= 0.2A; V_{CE}= 5V		200		MHz

◆ **h_{FE} Classifications**

R	Q	P
60-120	100-200	160-320