

isc Silicon NPN Power Transistor

2SC2275

DESCRIPTION

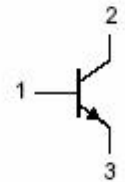
- Collector-Emitter Breakdown Voltage
: $V_{(BR)CEO} = 120V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SA985
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

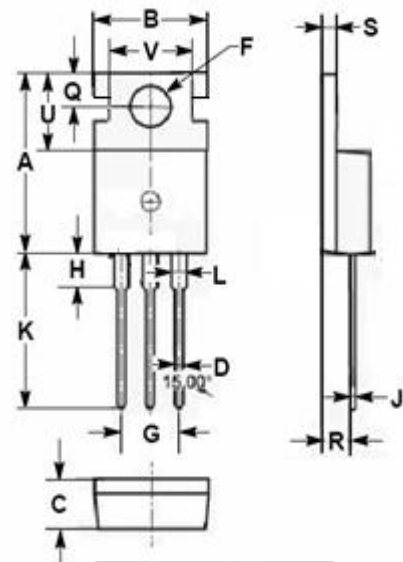
- Audio frequency power amplifier applications
- High frequency power amplifier applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

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 @ $T_a=25^\circ\text{C}$	1.5	W
	Total Power Dissipation @ $T_c=25^\circ\text{C}$	25	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



PIN 1. BASE
2. COLLECTOR
3. EMITTER
TO-220C package



DIM	mm	
	MIN	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

isc Silicon NPN Power Transistor**2SC2275****ELECTRICAL CHARACTERISTICS****T_c=25°C 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	μ A
I _{EBO}	Emitter Cutoff Current	V _{EB} = 3V; I _C = 0			1.0	μ A
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

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