

SPTECH Silicon NPN Power Transistor

2SC2275

DESCRIPTION

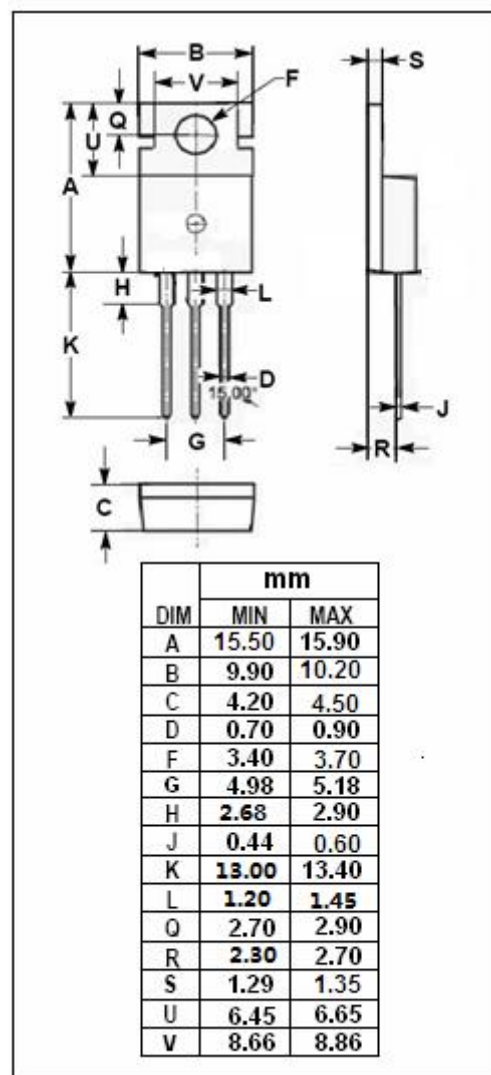
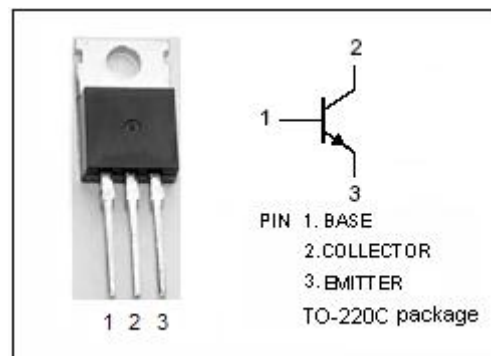
- Collector-Emitter Breakdown Voltage
: $V_{(BR)CEO} = 120V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SA985

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	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

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

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

◆ h_{FE} Classifications

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