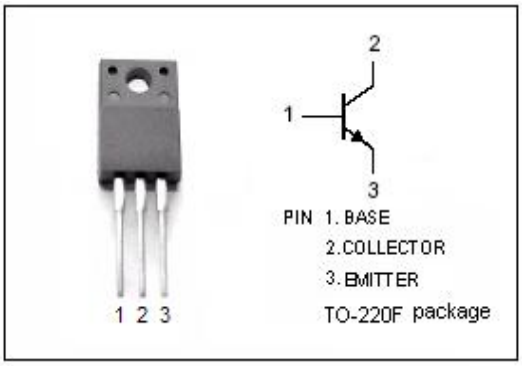
isc Silicon NPN Power Transistor — 2SC4075



DESCRIPTION

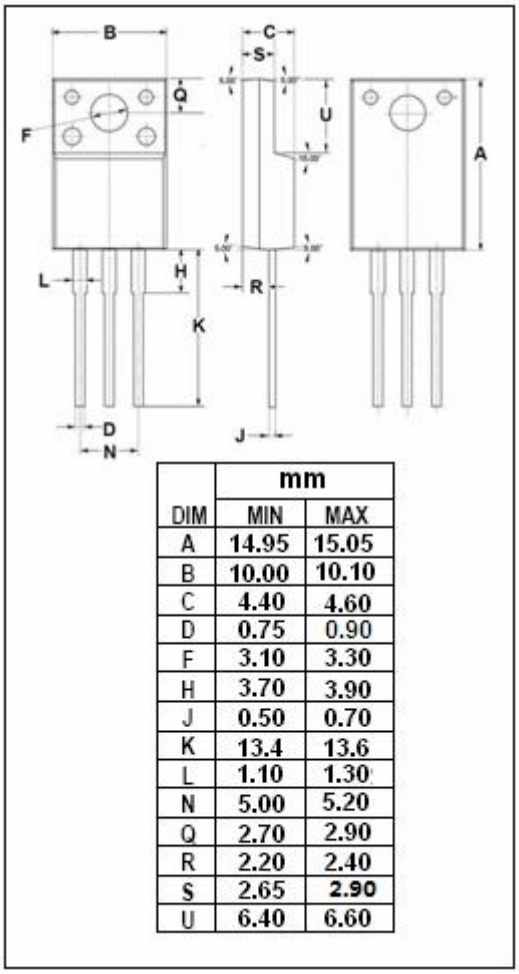
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 300V(Min)
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for color TV chroma output, sound output and B/W TV video output, audio output applications.

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	7	V
I_C	Collector Current-Continuous	0.2	A
I_{CM}	Collector Current-Peak	0.7	A
P_C	Collector Power Dissipation @T_C=25℃	10	W
	Collector Power Dissipation @T_a=25℃	2	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃



DIM	mm MIN	mm MAX
A	14.95	15.05
B	10.00	10.10
C	4.40	4.60
D	0.75	0.90
F	3.10	3.30
H	3.70	3.90
J	0.50	0.70
K	13.4	13.6
L	1.10	1.30
N	5.00	5.20
Q	2.70	2.90
R	2.20	2.40
S	2.65	2.90
U	6.40	6.60

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ELECTRICAL CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 1mA ; I_B= 0	300			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 50mA; I_B= 5mA			2.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 200V; I_E= 0			0.1	μA
I_{EBO}	Emitter Cutoff Current	V_{EB}= 5V; I_C= 0			0.1	μA
h_{FE}	DC Current Gain	I_C= 10mA; V_{CE}= 10V	40		200	
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 50V; f= 1MHz			5.3	pF
f_T	Current-Gain—Bandwidth Product	I_C= 10mA; V_{CE}= 30V	50			MHz

◆ **h_{FE} Classifications**

C	D	E
40-80	60-120	100-200

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