

isc Silicon NPN Power Transistor
2SC4382
DESCRIPTION

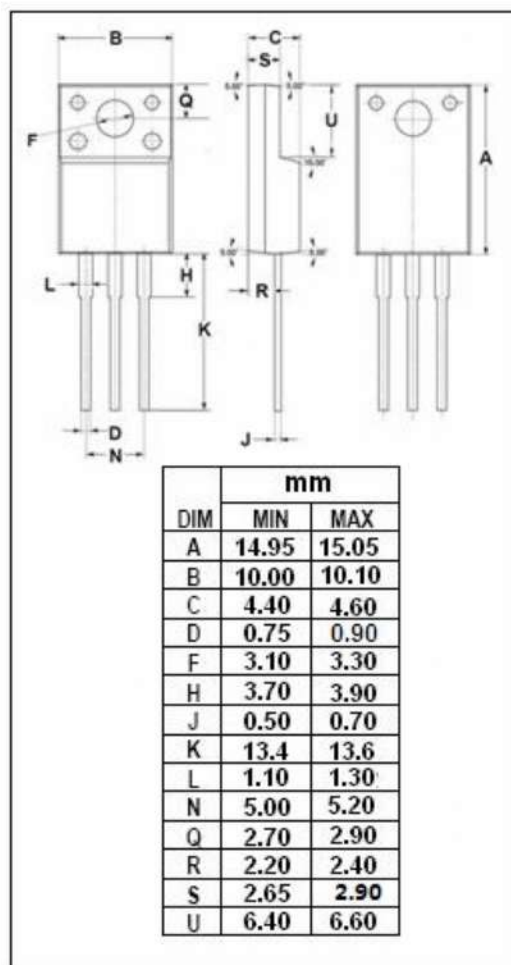
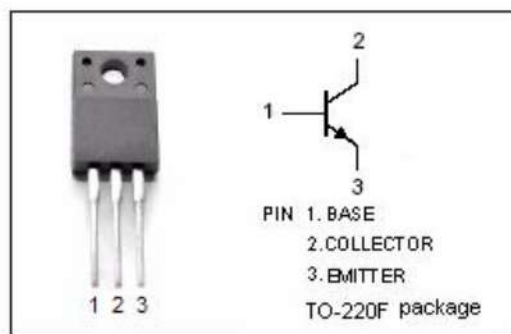
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = 200V(\text{Min})$
- DC Current Gain-
: $h_{FE} = 60(\text{Min})@ (V_{CE} = 10V, I_C = 0.7A)$
- Complement to Type 2SA1668
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for TV vertical output ,audio output driver and general purpose applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	200	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	2	A
I_B	Base Current-Continuous	1	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ\text{C}$	25	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature	-55~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C = 25mA$; $I_B = 0$	200			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 0.7A$; $I_B = 0.07A$			1.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = 200V$; $I_E = 0$			10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = 6V$; $I_C = 0$			10	μA
h_{FE}	DC Current Gain	$I_C = 0.7A$; $V_{CE} = 10V$	60			
C_{OB}	Output Capacitance	$I_E = 0$; $V_{CB} = 10V$; $f = 1MHz$		35		pF
f_T	Current-Gain—Bandwidth Product	$I_E = -0.2A$; $V_{CE} = 12V$		15		MHz

Switching Times

t_{on}	Turn-On Time	$I_C = 1A$; $I_{B1} = -I_{B2} = 0.1A$; $V_{CC} = 20V$; $R_L = 20\Omega$		1.0		μs
t_{stg}	Storage Time			3.0		μs
t_f	Fall Time			1.5		μs

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