

isc Silicon NPN Power Transistor

KTC1003

DESCRIPTION

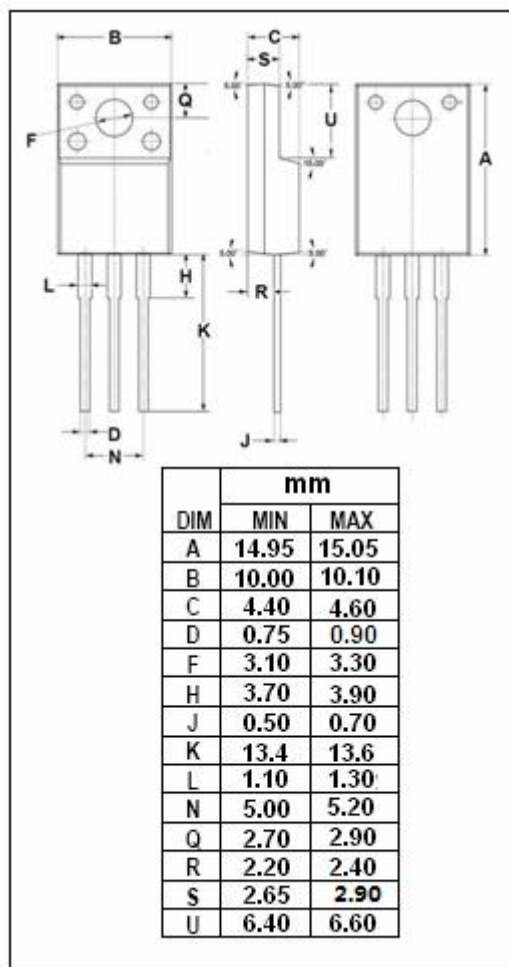
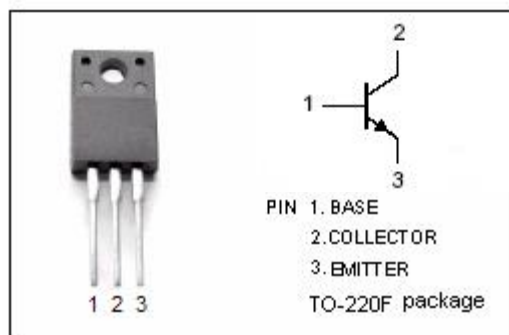
- Large Collector Current Capability-
: $I_C = 4A$ (Max)
- Collector Power Dissipation-
: $P_C = 30W$ (Max)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for B/W TV horizontal deflection output applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	4	A
I_{CM}	Collector Current-Peak	10	A
I_B	Base Current-Continuous	1	A
P_C	Collector Power Dissipation @ $T_C = 25^\circ C$	30	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	$I_C=30\text{mA}$; $I_B=0$	60			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=4\text{A}$; $I_B=0.4\text{A}$			1.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=4\text{A}$; $I_B=0.4\text{A}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=170\text{V}$; $I_E=0$			10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=5\text{V}$; $I_C=0$			10	μA
h_{FE-1}	DC Current Gain	$I_C=1\text{A}$; $V_{CE}=5\text{V}$	30		150	
h_{FE-2}	DC Current Gain	$I_C=4\text{A}$; $V_{CE}=5\text{V}$	20			
f_T	Current-Gain—Bandwidth Product	$I_C=0.5\text{A}$; $V_{CE}=5\text{V}$		8		MHz

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