

isc Silicon NPN Power Transistor

2SD1163

DESCRIPTION

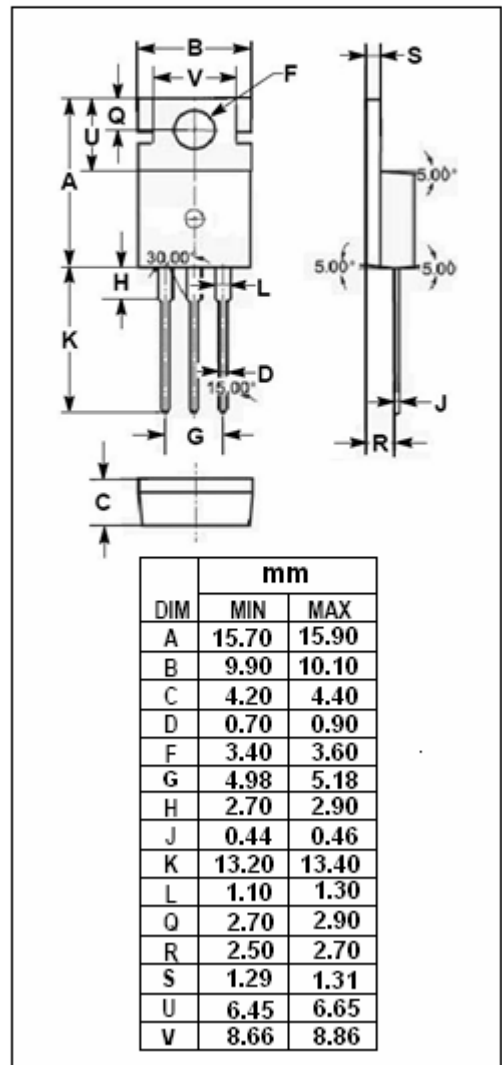
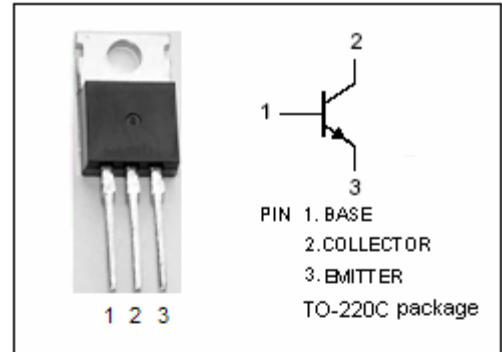
- Collector Current:  $I_C = 7A$
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 120V(\text{Min.})$

APPLICATIONS

- Designed for TV horizontal deflection applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	300	V
$V_{CEO}$	Collector-Emitter Voltage	120	V
$V_{EBO}$	Emitter-Base Voltage	6	V
$I_C$	Collector Current-Continuous	7	A
$I_{CM}$	Collector Current-Peak	10	A
$I_{C(surge)}$	Collector Current-Surge	20	A
$P_C$	Total Power Dissipation @ $T_C=25^\circ C$	40	W
$T_J$	Junction Temperature	150	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55~150	$^\circ C$



**isc Silicon NPN Power Transistor****2SD1163****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	$I_C=10\text{mA}$ ; $R_{BE}=\infty$	120			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=10\text{mA}$ ; $I_C=0$	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=5\text{A}$ ; $I_B=0.5\text{A}$			2.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=5\text{A}$ ; $I_B=0.5\text{A}$			1.2	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=300\text{V}$ ; $I_E=0$			5	mA
$h_{FE}$	DC Current Gain	$I_C=5\text{A}$ ; $V_{CE}=5\text{V}$	25			
$t_f$	Fall Time	$I_{CP}=3.5\text{A}$ ; $I_{B1}=0.45\text{A}$			0.5	$\mu\text{s}$