

INCHANGE Semiconductor

isc Product Specification

isc Silicon NPN Power Transistor

2SD1163

DESCRIPTION

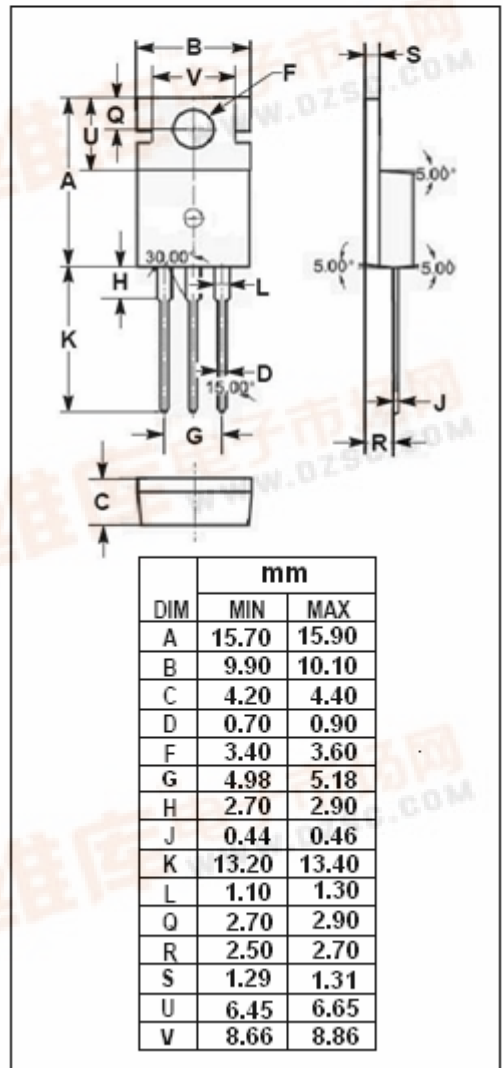
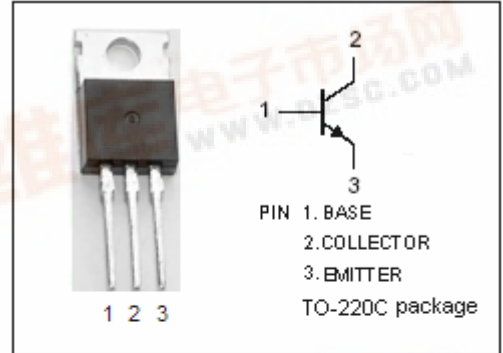
- Collector Current: $I_C = 7A$
- Collector-Emitter Breakdown Voltage: $V_{(BR)CEO} = 120V(\text{Min.})$

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	μs