

isc Silicon NPN Power Transistor

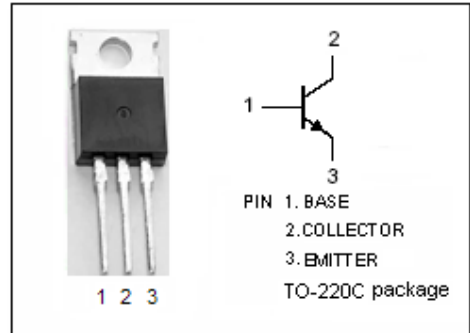
2SD1390

DESCRIPTION

- High Breakdown Voltage-
: $V_{CBO}= 1500V$ (Min)
- High Reliability

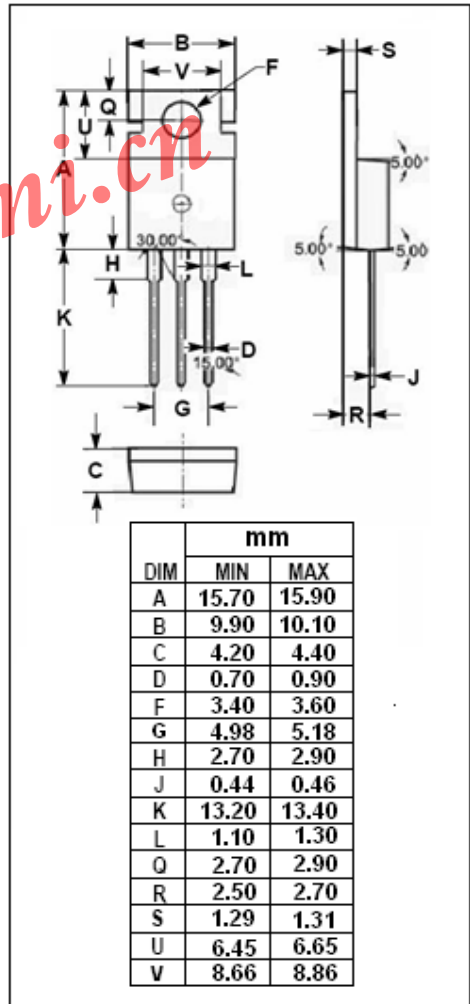
APPLICATIONS

- Designed for line-operated horizontal deflection output applications.



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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CES}	Collector-Emitter Voltage	1500	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current- Continuous	1	A
I_{CP}	Collector Current-Pulse	2.5	A
P_C	Collector Power Dissipation @ $T_C \leq 90^{\circ}C$	40	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
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E=1\text{mA}; I_C=0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=2\text{A}; I_B=1\text{A}$			5.0	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=2\text{A}; I_B=1\text{A}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=750\text{V}; I_E=0$			50	μA
		$V_{CB}=1500\text{V}; I_E=0$			1	mA
h_{FE}	DC Current Gain	$I_C=2\text{A}; V_{CE}=5\text{V}$	2		7	
t_f	Fall Time	$I_C=2.5\text{A}, I_{Bend}=1.1\text{A}, L_B=10\mu\text{H}$			1	μs
t_{stg}	Storage Time				11	μs