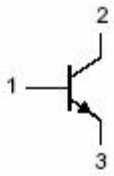
isc Silicon NPN Power Transistor — 2SD478



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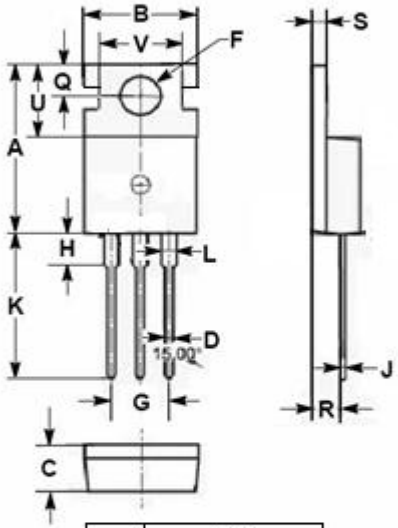
PIN 1. BASE
2.COLLECTOR
3. EMITTER
TO-220C package

DESCRIPTION

- Collector Power Dissipation: P_C= 30W
- Collector-Emitter Breakdown Voltage-
  : $V_{(BR)CEO}$= 150V(Min.)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for TV vertical deflection output applications.



DIM	mm MIN	mm MAX
A	15.50	15.90
B	9.80	10.20
C	4.20	4.50
D	0.70	0.90
F	3.40	3.70
G	4.98	5.18
H	2.68	2.90
J	0.44	0.60
K	12.80	13.40
L	1.20	1.45
Q	2.70	2.90
R	2.30	2.70
S	1.29	1.35
U	6.45	6.65
V	8.66	8.86

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	200	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	2	A
I_{CM}	Collector Current-Peak	5	A
P_C	Total Power Dissipation @ T_a=25℃	1.8	W
	Total Power Dissipation @ T_C=25℃	30	
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature Range	-45~150	℃

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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage	I_C= 10mA; R_{BE}= ∞	150			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	I_E= 5mA; I_C= 0	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	I_C= 0.5A; I_B= 50mA			2.0	V
$V_{BE(on)}$	Base-Emitter On Voltage	I_C= 50mA; V_{CE}= 4V			1.0	V
I_{CBO}	Collector Cutoff Current	V_{CB}= 120V ; I_E= 0			1	μA
h_{FE-1}	DC Current Gain	I_C= 50mA; V_{CE}= 4V	60		320	
h_{FE-2}	DC Current Gain	I_C= 0.5A; V_{CE}= 4V	60			
C_{OB}	Output Capacitance	I_E= 0; V_{CB}= 100V; f_{test}= 1.0MHz		22		pF

◆ **h_{FE-1} Classifications**

B	C	D
60-120	100-200	160-320

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