

isc Silicon NPN Power Transistor

2SD1069

DESCRIPTION

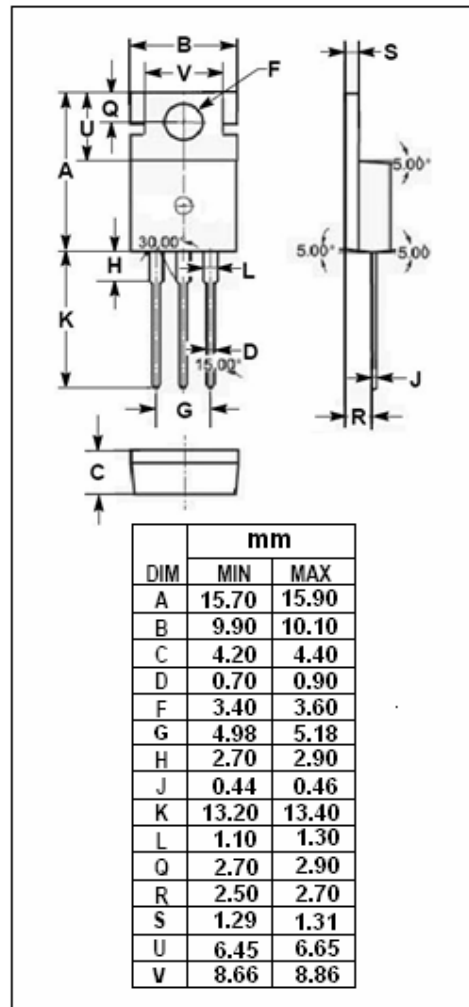
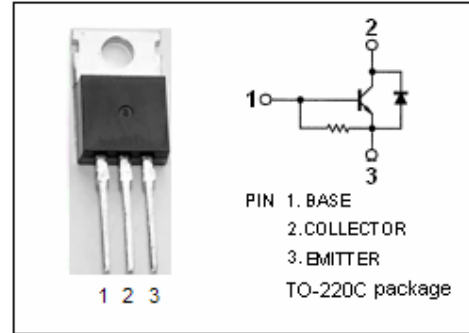
- High Collector Current Capability
- High Collector Power Dissipation Capability
- Built-in Damper Diode

APPLICATIONS

- TV horizontal deflection output applications.
- High voltage switching applications.

ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	300	V
V <sub>CEO</sub>	Collector-Emitter Voltage	150	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
I <sub>C</sub>	Collector Current-Continuous	7	A
I <sub>CM</sub>	Collector Current-Peak	15	A
I <sub>B</sub>	Base Current-Continuous	2	A
P <sub>C</sub>	Collector Power Dissipation T <sub>a</sub> =25°C	1.75	W
	Collector Power Dissipation T <sub>c</sub> =25°C	40	
T <sub>j</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C



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## ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage	$I_C= 100\text{mA}; L= 50\text{mH}$	150			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C= 1\text{mA}; I_E= 0$	300			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 0.1\text{A}; I_C= 0$	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 5\text{A}; I_B= 0.5\text{A}$			1.5	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 5\text{A}; I_B= 0.5\text{A}$			1.5	V
$I_{CES}$	Collector Cutoff Current	$V_{CE}= 250\text{V}; V_{BE}= 0$			1	mA
$h_{FE}$	DC Current Gain	$I_C= 5\text{A}; V_{CE}= 1.5\text{V}$	10			
$f_T$	Current-Gain—Bandwidth Product	$I_C= 0.2\text{A}; V_{CE}= 10\text{V}$		18		MHz
$V_{ECF}$	C-E Diode Forward Voltage	$I_F= 6\text{A}$			1.8	V
$t_f$	Fall Time	$I_{CP}= 5\text{A}; I_{B1(end)}= 0.5\text{A}$			1.0	$\mu\text{s}$