

isc Silicon NPN Power Transistor

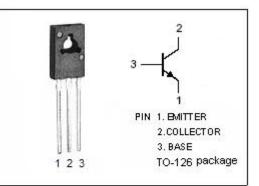
2SC5694

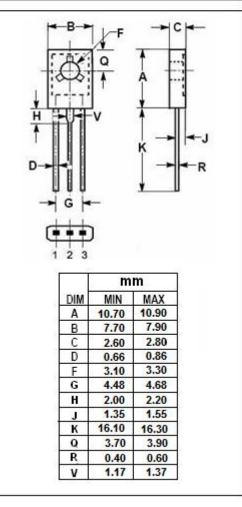
DESCRIPTION

- · High speed switching
- Large Current Capacity
- High allowable power dissipation
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

• Relay drivers, lanp drivers, motor drivers and printer drivers.





ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT		
V _{CBO}	Collector-Base Voltage	60	V		
V _{CEO}	Collector-Emitter Voltage	-Emitter Voltage 50			
V _{EBO}	Emitter-Base Voltage	6	V		
lc	Collector Current-Continuous	7	A		
Ісм	Collector Current-Peak	10	A		
Pc	Collector Power Dissipation @ Tc=25℃	10	W		
	Collector Power Dissipation @ T _a =25℃	1.2	vV		
TJ	Junction Temperature	150	°C		
T _{stg}	Storage Temperature Range	-55~150	°C		

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ELECTRICAL CHARACTERISTICS

T_c=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 10 μ A; I _E = 0	60			V
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 1mA; R _{BE} = ∞	50			V
V _{(BR)EBO}	Emitter-Base Breakdown Vltage	I _E = 10 μ A; I _C = 0	6			V
$V_{\text{CE}(\text{sat})}$	Collector-Emitter Saturation Voltage	I _C = 2.5A; I _B = 125mA			0.26	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C =2.5A; I _B = 125mA			1.2	V
Ісво	Collector Cutoff Current	V_{CB} = 40V; I_{E} = 0			0.1	μA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 4V; I _C = 0			0.1	μA
h _{FE}	DC Current Gain	Ic= 1A; VcE=2V	150		300	
f⊤	Current-Gain—Bandwidth Product	I _C = 0.5A; V _{CE} = 10V		330		MHz
Сов	Output Capacitance	I _E = 0; V _{CB} = 10V, f _{test} = 1MHz		28		pF

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