

isc Silicon NPN Power Transistor

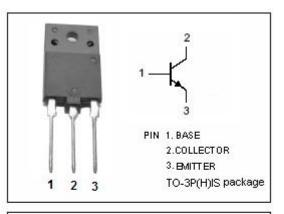
2SC5516

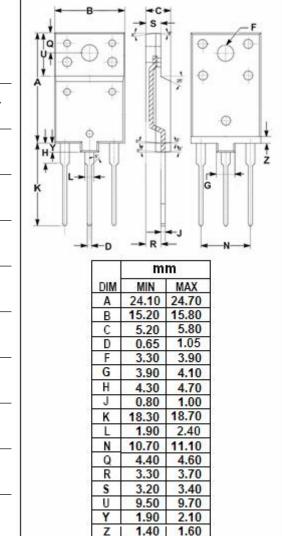
DESCRIPTION

- High Breakdown Voltage
- · High Switching Speed
- Low Saturation Voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

· Character display horizontal deflection output





ABSOLUTE MAXIMUM RATINGS(Ta=25 °C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	1500	V
V _{CEO}	Collector-Emitter Voltage	600	V
V_{EBO}	Emitter-Base Voltage	5	V
lc	Collector Current- Continuous	20	A
I _{СМ}	Collector Current- Continuous	30	A
IB	Base Current- Continuous	8	A
Pc	Collector Power Dissipation @ T_c =25 °C	70	w
TJ	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-55~150	°C

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ELECTRICAL CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 10A; I _B = 2.5A			3.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 10A; I _B = 2.5A			1.5	V
Ісво	Collector Cutoff Current	V _{CB} = 1500V; I _E = 0			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C = 0			50	uA
h _{FE}	DC Current Gain	I _C = 10A; V _{CE} = 5V	5		10	
f⊤	Current-Gain—Bandwidth Product	I _E = 0.1A ; V _{CE} = 10V		30		MHz

Switching times

t _{stg}	Storage Time	I _C = 10A , I _{B1} =2.5A; I _{B2} = -5.0A;	2.7	μs
tf	Fall Time		0.2	μ S

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