

isc Silicon NPN Power Transistor

2SD1652

DESCRIPTION

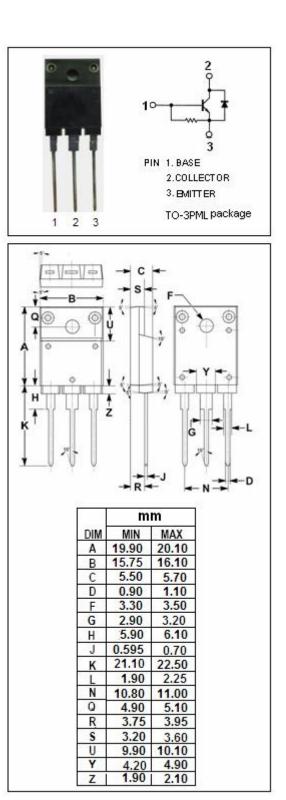
- High Breakdown Voltage-
 - : V_{CBO}= 1500V (Min)
- High Switching Speed
- High Reliability
- Built-in Damper Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

 Designed for color TV horizontal deflection output applications

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)						
SYMBOL	PARAMETER	VALUE	UNIT			
V _{CBO}	Collector-Base Voltage	1500	V			
V _{CEO}	Collector-Emitter Voltage	800	V			
V _{EBO}	Emitter-Base Voltage	6	V			
Ι _C	Collector Current- Continuous	6	A			
Іср	Collector Current-Peak	16	A			
Pc	Collector Power Dissipation @ Tc=25°C	60	W			
TJ	Junction Temperature	150	°C			
T _{stg}	Storage Temperature Range	-55~150	°C			

ABSOLUTE MAXIMUM RATINGS(Ta=25 °C



isc website: <u>www.iscsemi.com</u>



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ELECTRICAL CHARACTERISTICS

$T_{c}\text{=}25^{\circ}\!\!\!\mathrm{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	мах	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = 10mA; R _{BE} = ∞	800			V
V _{(BR)CBO}	Collector-Base Breakdown Voltage	I _C = 1mA; I _E = 0	1500			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 200mA; I _C = 0	7			V
V _{CE} (sat)	Collector-Emitter Saturation Voltage	I _C = 5A; I _B = 1A			5.0	V
V _{BE} (sat)	Base-Emitter Saturation Voltage	I _C = 5А; I _B =01			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 800V ; I _E = 0			10	μ Α
І _{ЕВО}	Emitter Cutoff Current	V _{EB} = 4V ; I _C = 0	40		130	mA
h _{FE}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	8			
V _{ECF}	C-E Diode Forward Voltage	I _F = 6A			2.0	V
t _f	Fall Time	I _C = 5A , I _{B1} = 1A ; I _{B2} = 2A R _L = 40 Ω ; V _{CC} = 200V			0.4	μs

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