

isc Silicon NPN Power Transistor

DESCRIPTION

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

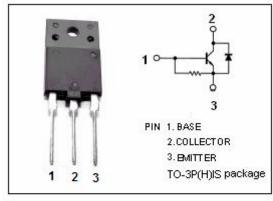
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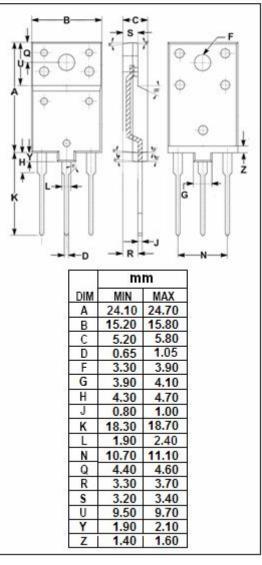
APPLICATIONS

Designed for color TV horizontal output applications

ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V _{СВО}	Collector-Base Voltage	1500	V
V _{CEO}	Collector-Emitter Voltage	600	V
V _{EBO}	Emitter-Base Voltage	5	V
lc	Collector Current- Continuous	7	Α
Іср	Collector Current- Pulse	14	А
I _B	Base Current- Continuous	3.5	А
Pc	Collector Power Dissipation @ T _C =25℃	50	W
TJ	Junction Temperature	150	$^{\circ}$ C
T _{stg}	Storage Temperature Range	-55~150	$^{\circ}$







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2SD2539

ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 200mA ; I _C = 0	5			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 = 5A; I _B = 1A			1.3	V
Ісво	Collector Cutoff Current	V _{CB} = 1500V; I _E = 0			1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V; I _C = 0	66		200	mA
h _{FE-1}	DC Current Gain	I _C = 1A; V _{CE} = 5V	8		28	
h _{FE-2}	DC Current Gain	Ic= 5A; Vc== 5V	5		9	
V _{ECF}	C-E Diode Forward Voltage	I _F = 5A			2.0	V
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A; V _{CE} = 10V		2		MHz
Сов	Output Capacitance	I _E = 0; V _{CB} = 10V; f= 1.0MHz		115		pF
t _{stg}	Storage Time I _{CP} = 5A , I _{B1(end)} = 1.0A;			6	9	μ s
t _f	Fall Time	f _H = 15.75kHz		0.3	0.6	μS

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