



isc Silicon NPN Power Transistor

DESCRIPTION

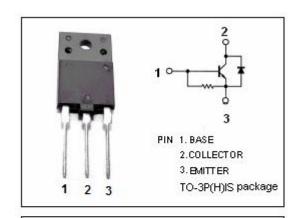
- · High Breakdown Voltage-
 - : V_{CBO}= 1500V (Min)
- · High Switching Speed
- Low Saturation Voltage
- · Built-in Damper Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

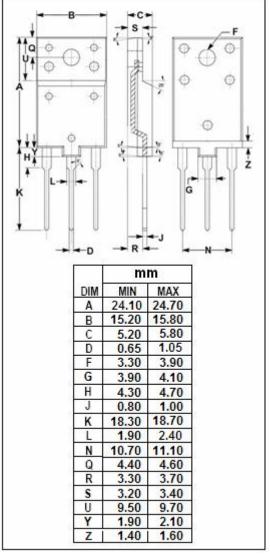
APPLICATIONS

Designed for color TV horizontal output applications

ABSOLUTE MAXIMUM RATINGS(T_a=25℃)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	1500	V
V _{CEO}	Collector-Emitter Voltage	600	٧
V _{EBO}	Emitter-Base Voltage	5	V
lc	Collector Current-Continuous	6	А
Ісм	Collector Current-Peak	10	Α
l _Β	Base Current- Continuous	3	Α
Pc	Collector Power Dissipation @ T _C =25℃ 50		W
TJ	Junction Temperature	150	$^{\circ}$
T _{stg}	Storage Temperature Range	-55~150	$^{\circ}$







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2SD2125

ELECTRICAL CHARACTERISTICS

Tc=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			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 500V; I _E = 0			10	μА
h _{FE-1}	DC Current Gain	I _C = 1A; V _{CE} = 5V	8		20	
h _{FE-2}	DC Current Gain	I _C = 5A; V _{CE} = 5V	5			
V _{ECF}	C-E Diode Forward Voltage	I _F = 6A			2.0	V
f⊤	Current-Gain—Bandwidth Product	I _C = 0.1A; V _{CE} = 10V		3		MHz
Сов	Output Capacitance	I _E = 0; V _{CB} = 10V; f _{test} =1.0MHz		165		pF
t _f	Fall Time	I _{CP} = 5A, I _{B1(end)} = 1A			0.5	μS

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