

isc Silicon NPN Power Transistor

2SD1429

DESCRIPTION

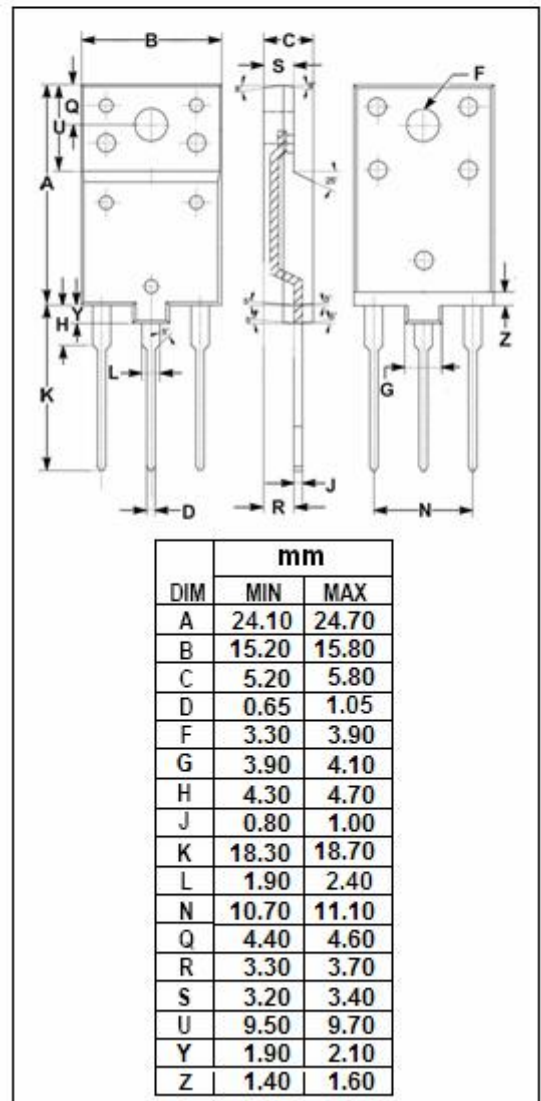
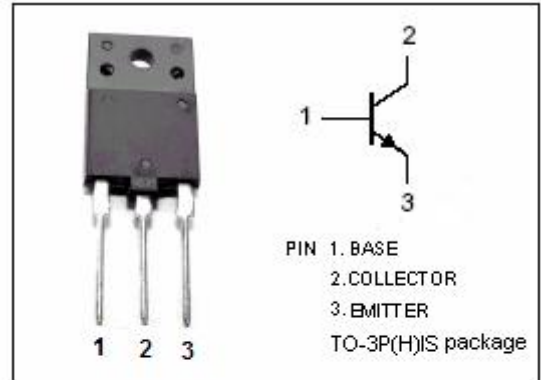
- High Breakdown Voltage-
: $V_{CBO}= 1500V$ (Min)
- High Switching Speed
- Low Saturation Voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Color TV horizontal deflection output applications

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}C$)

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
I_C	Collector Current- Continuous	2.5	A
I_E	Emitter Current	2.5	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}C$	80	W
T_J	Junction Temperature	150	$^{\circ}C$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}C$



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = 1mA ; I _C = 0	5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 2A ; I _B = 0.6A		4.0	8.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 2A ; I _B = 0.6A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 1000V ; I _E = 0			10	uA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 5V ; I _C = 0			0.1	mA
h _{FE}	DC Current Gain	I _C = 0.5A ; V _{CE} = 5V	8			
f _T	Current-Gain—Bandwidth Product	I _C = 0.1A ; V _{CE} = 10V		3		MHz
C _{OB}	Output Capacitance	I _E = 0 ; V _{CB} = 10V ; f _{test} =1.0MHz		95		pF
t _f	Fall Time	I _C = 2A , I _B = 0.6A,			1.0	μ s

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