

isc Silicon NPN Power Transistor

2SD2645

DESCRIPTION

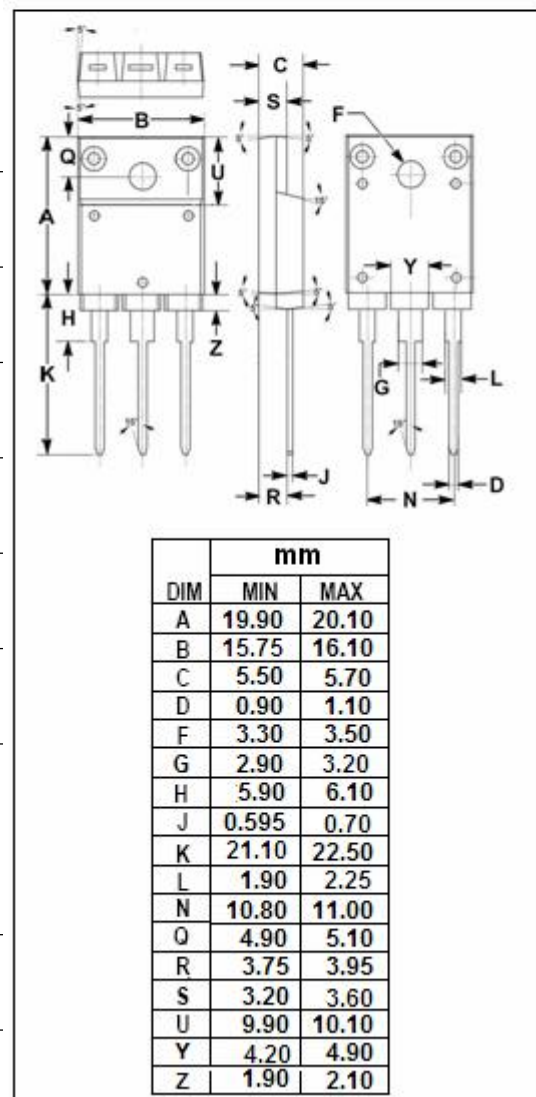
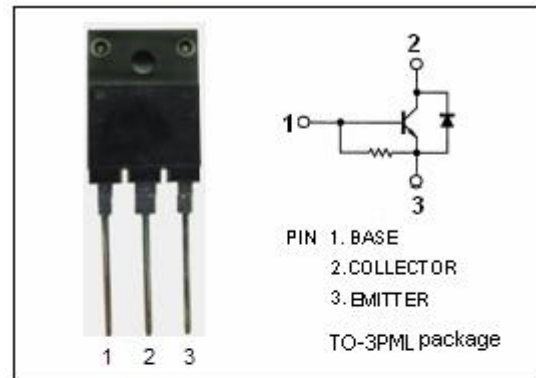
- High Breakdown Voltage-
: $V_{CBO} = 1500V$ (Min)
- High Switching Speed
- High Reliability
- Built-in Damper Diode
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- 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	800	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current- Continuous	10	A
I_{CP}	Collector Current-Pulse	25	A
P_C	Collector Power Dissipation @ $T_a = 25^\circ C$	3	W
	Collector Power Dissipation @ $T_c = 25^\circ C$	80	
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-55~150	$^\circ C$



isc Silicon NPN Power Transistor**2SD2645****ELECTRICAL CHARACTERISTICS****T_c=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEQ(SUS)}	Collector-Emitter Sustaining Voltage	I _C = 50mA; I _B = 0	800			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 7.2A; I _B = 1.44A			3.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 7.2A; I _B = 1.44A			1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 800V; I _E = 0			10	μA
I _{CES}	Collector Cutoff Current	V _{CE} = 1500V; R _{BE} = 0			1.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 4V; I _C = 0	40		130	mA
h _{FE-1}	DC Current Gain	I _C = 1A; V _{CE} = 5V	15			
h _{FE-2}	DC Current Gain	I _C = 8A; V _{CE} = 5V	5		8	
V _{ECF}	C-E Diode Forward Voltage	I _F = 8A			2.0	V
t _f	Fall Time	I _C = 5A, I _{B1} = 1A; I _{B2} = 2A			0.3	μs

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