

isc Silicon NPN Power Transistor
MD1802FX
DESCRIPTION

- High Voltage
- Low base-drive requirements
- Collector-Emitter Sustaining Voltage-
: $V_{CEO(SUS)} = 700V$ (Min)
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

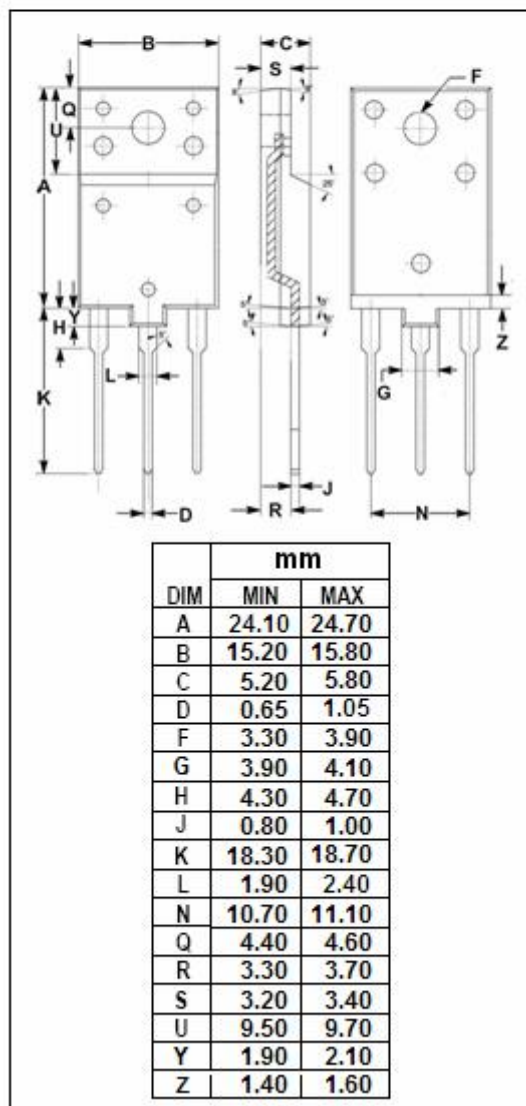
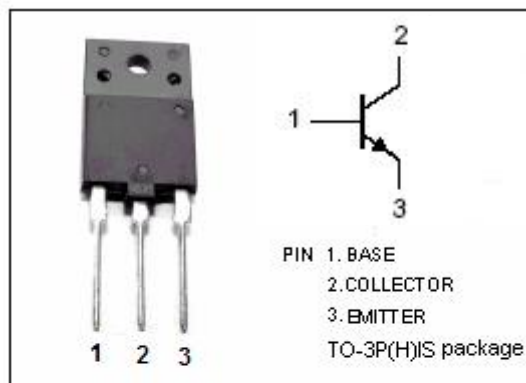
- Horizontal deflection output for TV
- Switch mode power supplies for CRT TV

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	9	V
I_C	Collector Current- Continuous	10	A
I_{CM}	Collector peak current ($t_p < 5ms$)	15	A
I_B	Base Current- Continuous	5	A
P_{TOT}	Total dissipation at $T_c = 25^\circ C$	57	W
T_J	Junction Temperature	150	$^\circ C$
T_{stg}	Storage Temperature Range	-65~150	$^\circ C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R_{th-j-c}	Thermal Resistance, Junction to Case	2.2	$^\circ C/W$



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ELECTRICAL CHARACTERISTICS

T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(sus)}	Collector-emitter sustaining Voltage	I _c = 10mA; I _c = 0	700			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _c = 5.0A; I _B =1.25A			1.5	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _c = 5.0A; I _B =1.25A			1.2	V
I _{CBO}	Collector Cutoff Current	V _{CB} = 1500V ; I _E = 0			0.2	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 9V ; I _c = 0			1	mA
h _{FE-1}	DC Current Gain	I _c = 1A ; V _{CE} = 5V		23		
h _{FE-2}	DC Current Gain	I _c = 5A ; V _{CE} = 1V		5.5		
h _{FE-3}	DC Current Gain	I _c = 5A ; V _{CE} = 5V	5.5			

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