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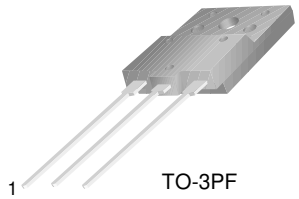
TV Horizontal Output Applications



1

TO-3PF

1.Base 2.Collector 3.Emitter

NPN Triple Diffused Planar Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CES}	Collector-Emitter Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	700	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current (DC)	5	A
I_{CP}	*Collector Current (Pulse)	15	A
P_C	Collector Dissipation (T_C=25°C)	60	W
T_J	Junction Temperature	150	°C
T_{STG}	Storage Temperature	- 65 ~ 150	°C

Electrical Characteristics T_C=25°C unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
V_{CEO}(sus)	* Collector-Emitter Sustaining Voltage	I_C = 100mA, I_B = 0	700			V
BV_{EBO}	Emitter-Base Breakdown Voltage	I_E = 10mA, I_C = 0	5			V
I_{CES}	Collector Cut-off Current	V_{CE} = 1500V, V_{BE} = 0			1	mA
I_{EBO}	Emitter Cut-off Current	V_{EB} = 5V, I_C = 0			10	mA
h_{FE}	* DC Current Gain	V_{CE} = 5V, I_C = 4.5A	2.25			
V_{CE}(sat)	* Collector-Emitter Saturation Voltage	I_C = 4.5A, I_B = 2A			1	V
V_{BE}(sat)	* Base-Emitter Saturation Voltage	I_C = 4.5A, I_B = 2A			1.5	V

* Pulse Test: PW = 300μs, duty cycle = 1.5% Pulsed

Typical Characteristics

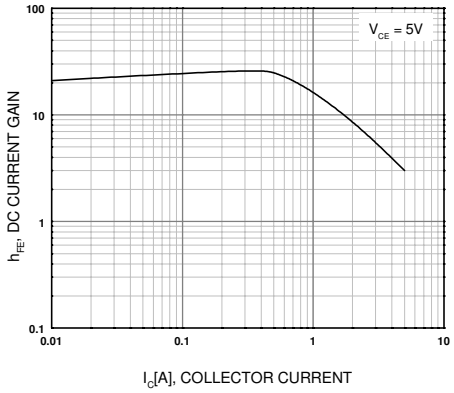


Figure 1. Static Characteristic

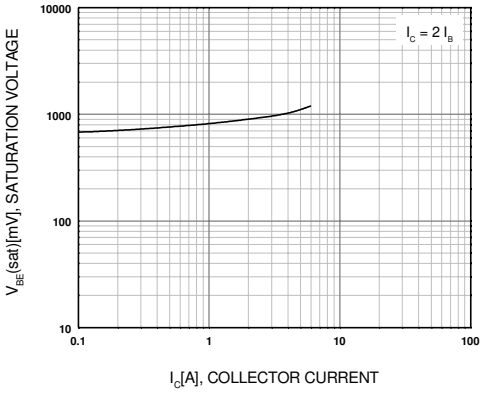


Figure 2. Base-Emitter Saturation Voltage

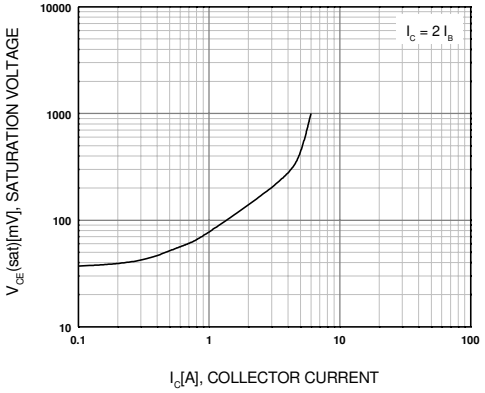


Figure 3. Collector-Emitter Saturation Voltage

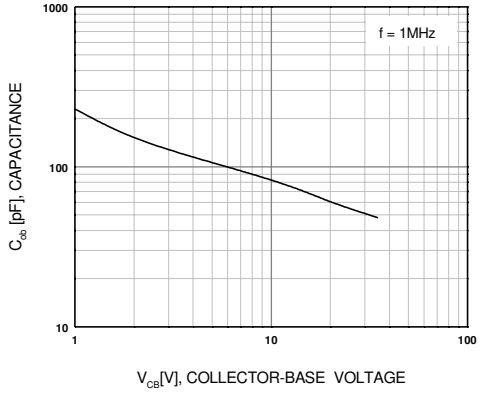


Figure 4. Collector Output Capacitance

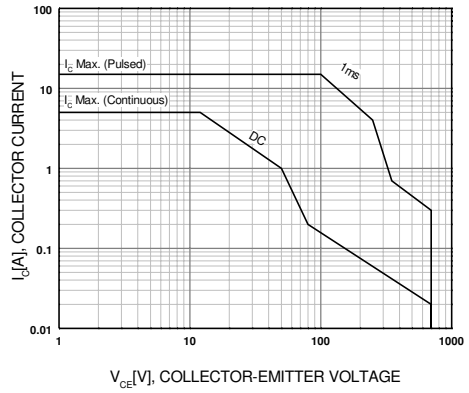


Figure 5. Safe Operating Area

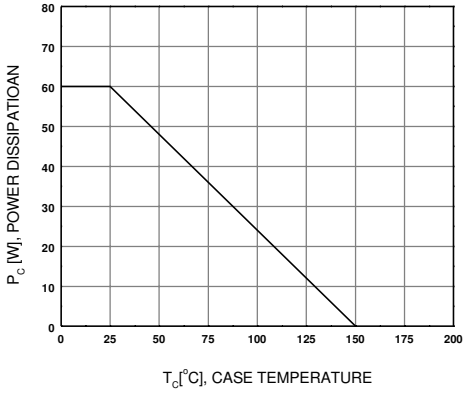
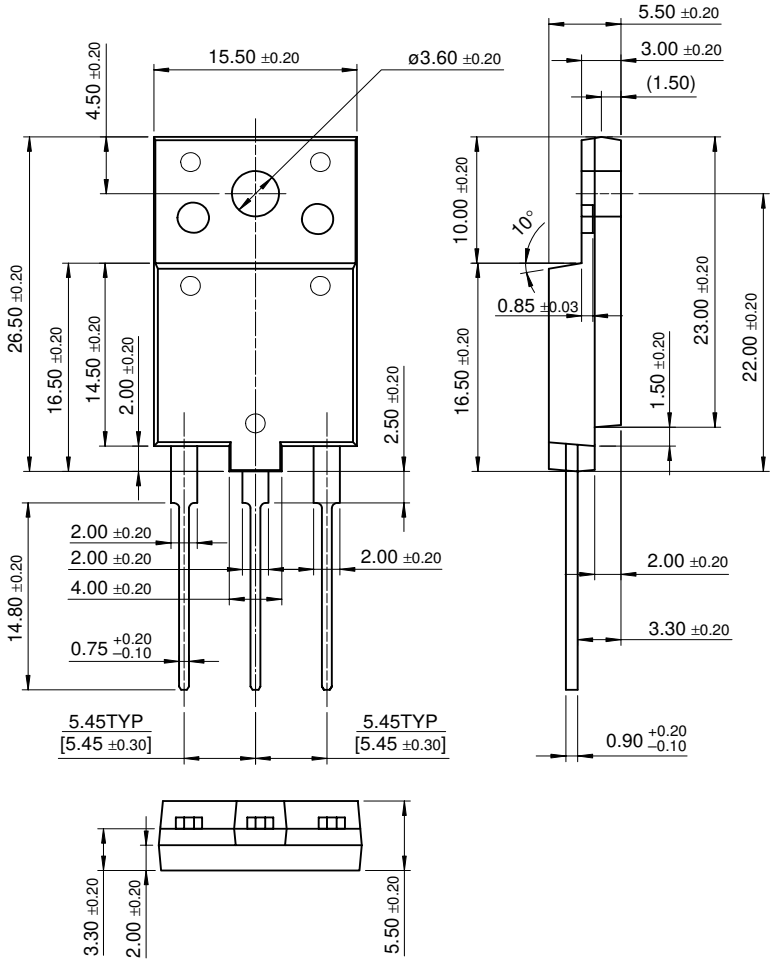


Figure 6. Power Derating

Package Dimensions

TO-3PF



Dimensions in Millimeters

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CoolFET™	FASTr™	MicroFET™	PowerTrench®	SuperSOT™-6
CROSSVOLT™	FRFET™	MicroPak™	QFET™	SuperSOT™-8
DOME™	GlobalOptoisolator™	MICROWIRE™	QS™	SyncFET™
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