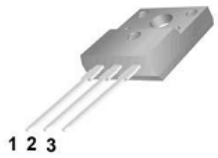
WGF13009

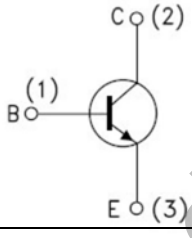
High Voltage Switch Mode Application

- High Speed Switching
- Suitable for Switching Regulator and Motor Control

TO-220F

RoHS COMPLIANT





1. Base (B)
2. Collector (C)
3. Emitter (E)

Absolute Maximum Ratings (Ta=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	700	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	9	V
I_C	Collector Current (DC)	12	A
I_{CP}	Collector Current (Pulse)	24	A
I_B	Base Current	6	A
P_C	Collector Dissipation (T_C=25°C)	100	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 = 10mA, I_B = 0	400			V
I_{EBO}	Emitter Cut-off Current	V_{EB} = 9V, I_C = 0			1	mA
h_{FE}	* DC Current Gain	V_{CE} = 5V, I_C = 5A V_{CE} = 5V, I_C = 8A	8 6		40 30	
V_{CE}(sat)	* Collector-Emitter Saturation Voltage	I_C = 5A, I_B = 1A I_C = 8A, I_B = 1.6A I_C = 12A, I_B = 3A			1 1.5 3	V V V
V_{BE} (sat)	* Base-Emitter Saturation Voltage	I_C = 5A, I_B = 1A I_C = 8A, I_B = 1.6A			1.2 1.6	V V
C_{ob}	Output Capacitance	V_{CB} = 10V, f = 0.1MHz		180		pF
f_T	Current Gain Bandwidth Product	V_{CE} = 10V, I_C = 0.5A	4			MHz
t_{ON}	Turn On Time	V_{CC} = 125V, I_C = 8A I_{B1} = - I_{B2} = 1.6A R_L = 15,6Ω			1.1	µs
t_{STG}	Storage Time				3	µs
t_F	Fall Time				0.7	µs

* Pulse test: PW≤300µs, Duty cycle≤2%

Typical Characteristics

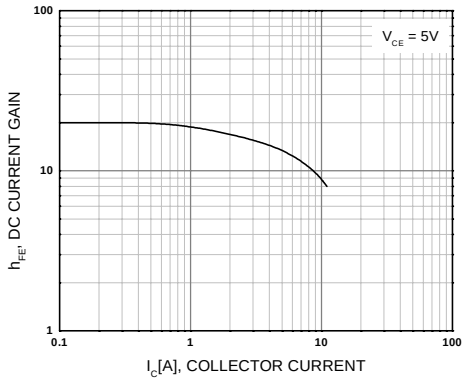


Figure 1. DC current Gain

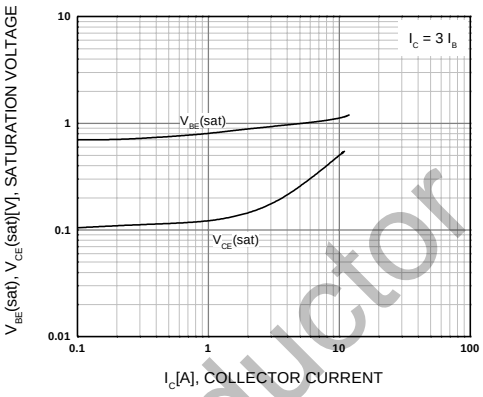


Figure 2. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

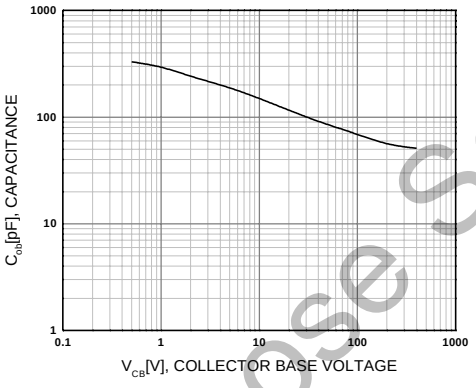


Figure 3. Collector Output Capacitance

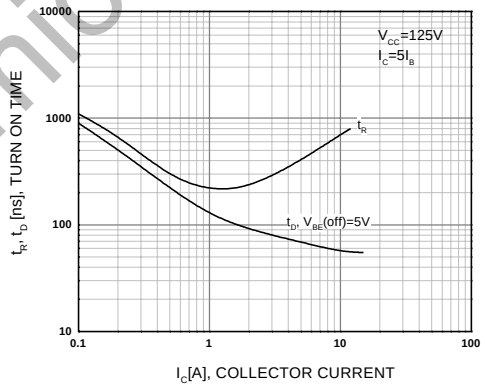


Figure 4. Turn On Time

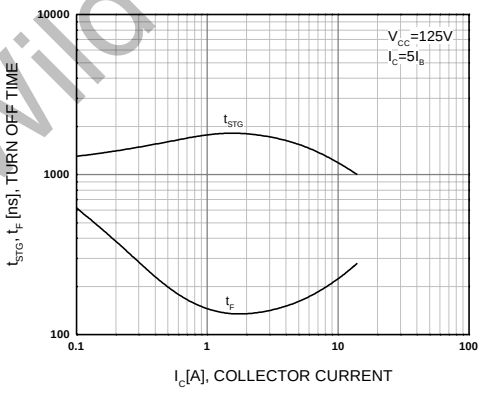


Figure 5. Turn Off Time

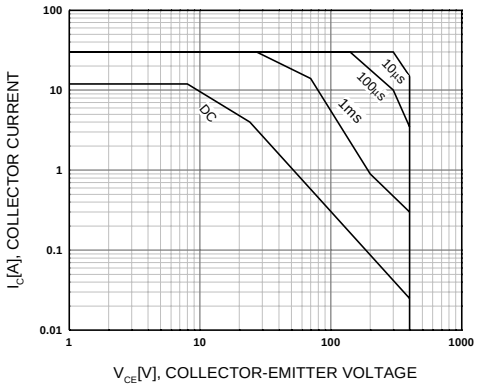


Figure 6. Forward Bias Safe Operating Area

Typical Characteristics

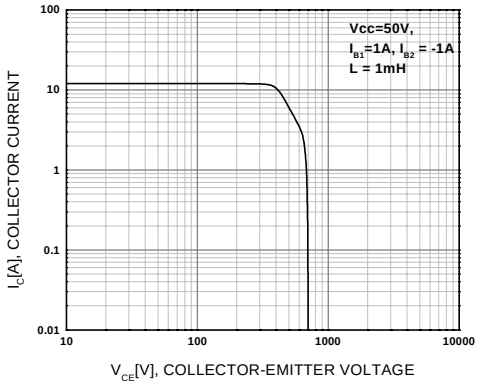


Figure 7. Reverse Bias Safe Operating Area

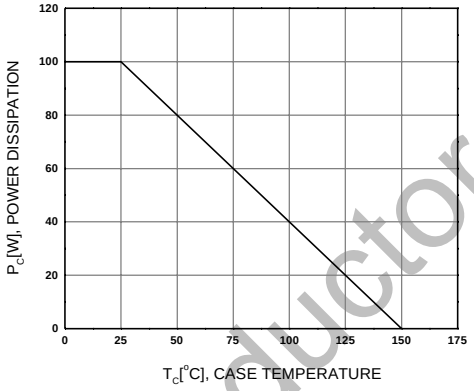
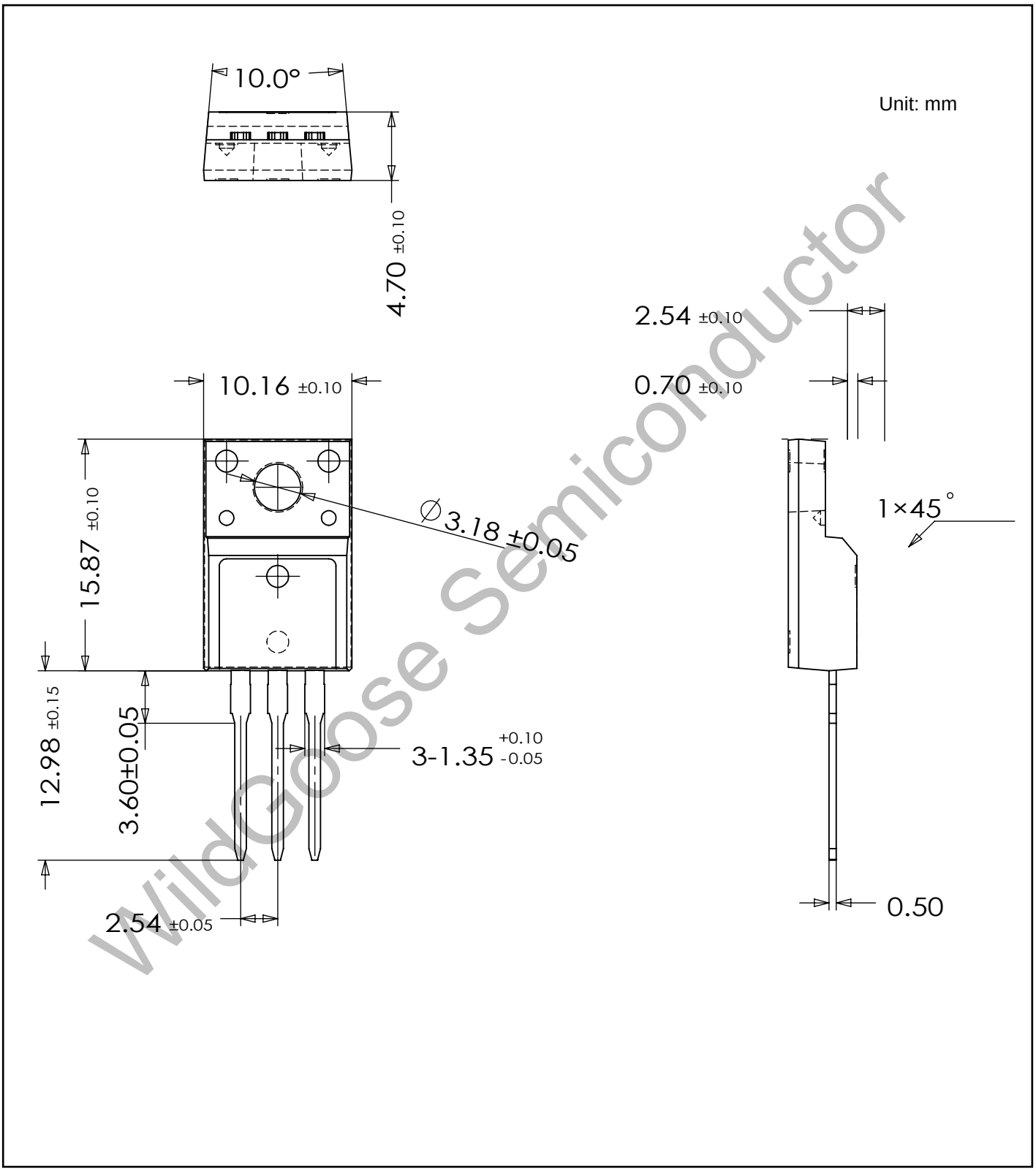


Figure 8. Power Derating

Package Dimension

TO-220F



X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Bipolar Transistors - BJT ***category:***

Click to view products by Wild Goose ***manufacturer:***

Other Similar products are found below :

BC559C MCH4017-TL-H MMBT-2369-TR BC546/116 NJVMJD148T4G NTE16 NTE195A IMX9T110 2N4401-A 2N6728 2SA1419T-TD-H 2SB1204S-TL-E 2SC5488A-TL-H FMC5AT148 2N2369ADCSM 2N2907A 2N3904-NS 2N5769 2SC4618TLN CPH6501-TL-E US6T6TR BAX18/A52R BC556/112 IMZ2AT108 MMST8098T146 MCH6102-TL-E BC846B-13-F 2N3879 30A02MH-TL-E NTE13 NTE282 NTE323 NTE350 NTE81 JANTX2N2920L JANSR2N2907AUB CMLT3946EG TR SNSS40600CF8T1G CMLT3906EG TR GRP-DATA-JANS2N2907AUB GRP-DATA-JANS2N2222AUA MMDT3946FL3-7 2N4240 JANS2N3019 MSB30KH-13 2N2221AUB 2SD1815T-TL-E 2N6678 2N2907Ae4 JAN2N3507