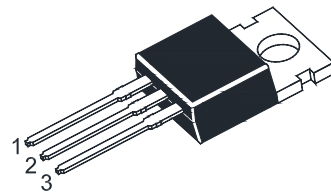


NPN Silicon Epitaxial Planar Power Transistor

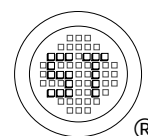
for high voltage, high-speed power switching application

1.Base 2.Collector 3.Emitter
TO-220FB Plastic Package**Absolute Maximum Ratings ($T_a = 25\text{ }^{\circ}\text{C}$)**

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	700	V
Collector Emitter Voltage	V_{CEO}	400	V
Emitter Base Voltage	V_{EBO}	9	V
Collector Current	I_C	8	A
Total Power Dissipation ($T_a = 25\text{ }^{\circ}\text{C}$)	P_{tot}	2	W
Total Power Dissipation ($T_C = 25\text{ }^{\circ}\text{C}$)	P_{tot}	80	W
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^{\circ}\text{C}$

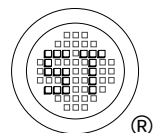
Thermal Characteristics

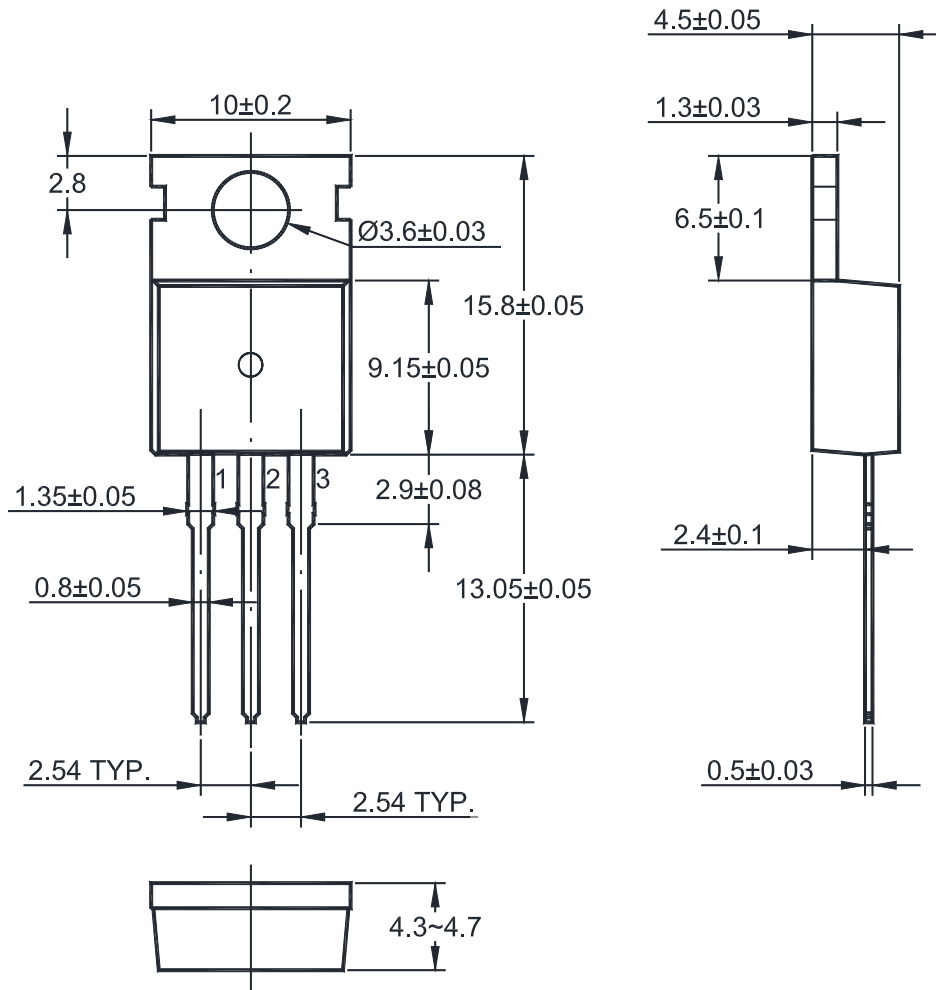
Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Case ($T_C = 25\text{ }^{\circ}\text{C}$)	$R_{\theta JC}$	1.6	$^{\circ}\text{C/W}$
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	62.5	$^{\circ}\text{C/W}$



Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $V_{CE} = 5\text{ V}$, $I_C = 2\text{ A}$	h_{FE}	8	40	-
Collector Base Cutoff Current at $V_{CB} = 700\text{ V}$	I_{CBO}	-	1	mA
Emitter Base Cutoff Current at $V_{EB} = 9\text{ V}$	I_{EBO}	-	1	mA
Collector Base Breakdown Voltage at $I_C = 1\text{ mA}$	$V_{(BR)CBO}$	700	-	V
Collector Emitter Breakdown Voltage at $I_C = 10\text{ mA}$	$V_{(BR)CEO}$	400	-	V
Emitter Base Breakdown Voltage at $I_E = 1\text{ mA}$	$V_{(BR)EBO}$	9	-	V
Collector Emitter Saturation Voltage at $I_C = 5\text{ A}$, $I_B = 1\text{ A}$	$V_{CE(sat)}$	-	2	V
Base Emitter Saturation Voltage at $I_C = 5\text{ A}$, $I_B = 1\text{ A}$	$V_{BE(sat)}$	-	1.6	V
Transition Frequency at $V_{CE} = 10\text{ V}$, $I_C = 0.5\text{ A}$	f_T	4	-	MHz





Marking information

" 13007 " = Part No.

" ***** " = Date Code Marking

Font type: Arial

