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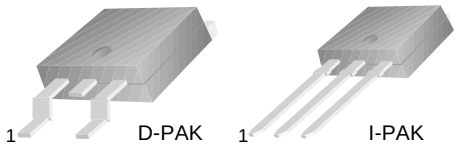
MJD340

High Voltage Power Transistors
D-PAK for Surface Mount Applications

- Lead Formed for Surface Mount Applications (No Suffix)
- Straight Lead (I-PAK, "- I" Suffix)



1.Base 2.Collector 3.Emitter

NPN Epitaxial Silicon Transistor

Absolute Maximum Ratings T_C=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	3	V
I_C	Collector Current (DC)	0.5	A
I_{CP}	Collector Current (Pulse)	0.75	A
P_C	Collector Dissipation (T_C=25°C)	15	W
	Collector Dissipation (T_a=25°C)	1.56	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.	Max.	Units
V_{CEO}(sus)	* Collector Emitter Sustaining Voltage	I_C = 1mA, I_B = 0	300		V
I_{CEO}	Collector Cut-off Current	V_{CB} = 300V, I_E =0		0.1	mA
I_{EBO}	Emitter Cut-off Current	V_{EB} = 3V, I_C = 0		0.1	mA
h_{FE}	* DC Current Gain	V_{CE} = 10V, I_C = 50mA	30	240	

* Pulse Test: PW≤300μs, Duty Cycle≤2%

Typical Characteristics

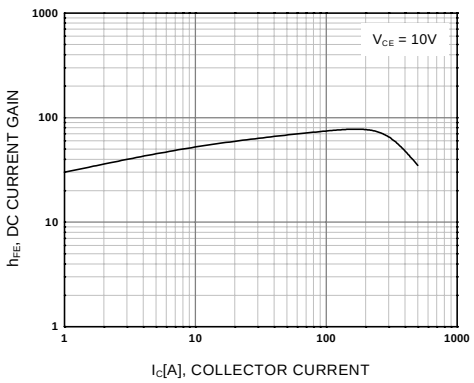


Figure 1. DC current Gain

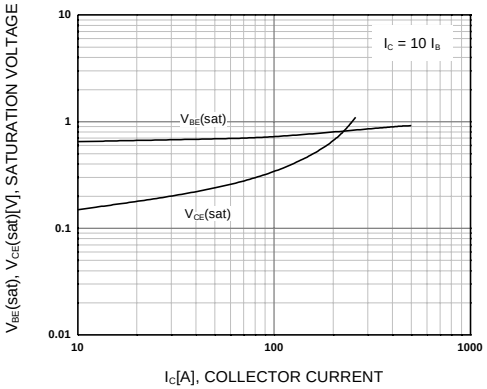


Figure 2. Base-Emitter Saturation Voltage Collector-Emitter Saturation Voltage

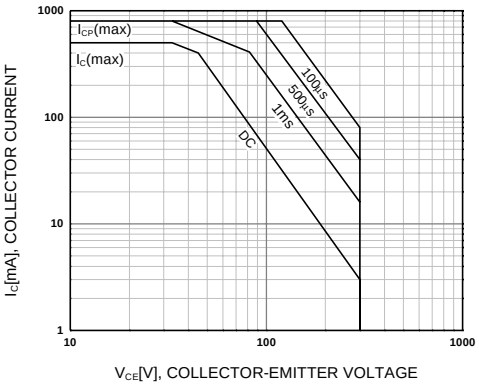


Figure 3. Safe Operating Area

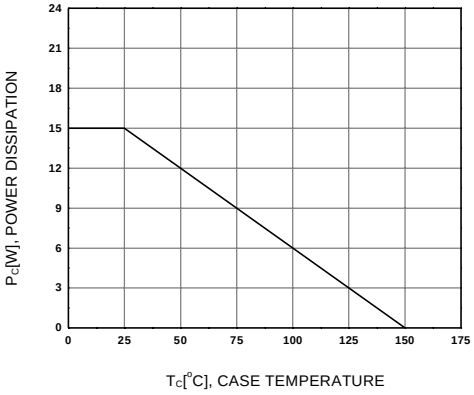
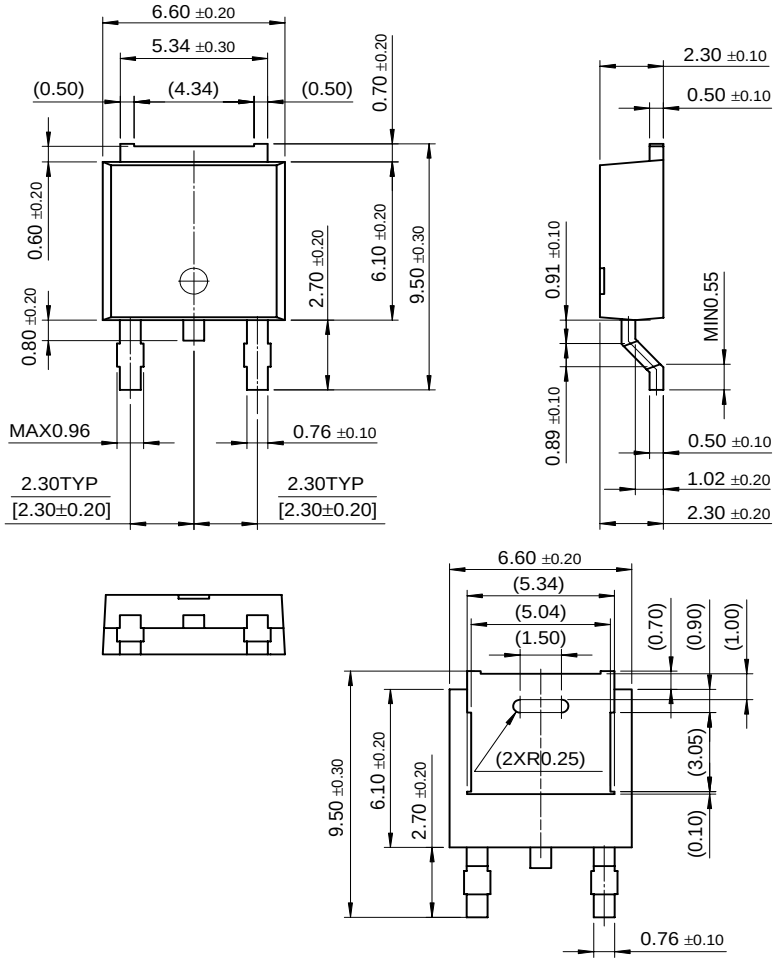


Figure 4. Power Derating

Package Demensions

D-PAK



Dimensions in Millimeters

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