Data Sheet

NPN SILICON TRANSISTOR
HIGH VOLTAGE TRANSISTOR

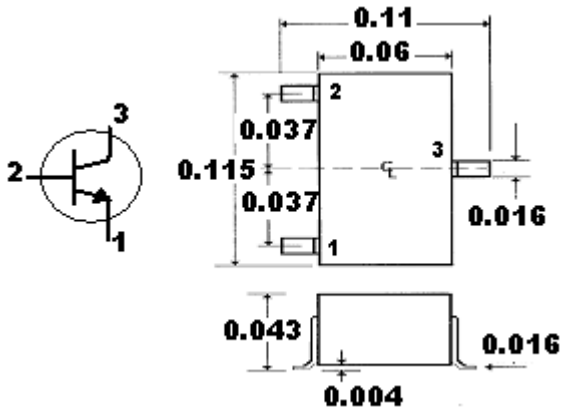
FMBTA42

Description



SOT-23

Mechanical Dimensions



Dimension in Inch

- ☐ JUNCTION TEMPERATURE ---------- +150℃ MAX
- ☐ STORAGE TEMPERATURE ---------- -55~ + 150℃
- ☐ MAX POWER DISSIPATION Ta=25℃ ---------- 250mW
- ☐ MAX VOLTAGE AND CURRENT Ta=25℃

  VCBO COLLECTOR TO BASE VOLTAGE---------- 300V

  VCEO COLLECTOR TO EMITTER VOLTAGE-------- 300V

  VEBO EMITTER TO BASE VOLTAGE---------- 6.0V

  IC COLLECTOR CURRENT---------- 500mA

Characteristics (Ta=25℃)

Collector-Emitter Voltage@ Ic=10mA	Vceo		300V
Collector-Base Breakdown@ Voltage Ic=100uA	Vcbo		300V
Emitter- base Breakdown Voltage@ Ie =10uA	Vebo		6V
Collector Cutoff Current@ Vcb=200V	Icbo	Max	100nA
Emitter cutoff Current@ Vce=6V	Iebo	Max	100nA
Ic=20mA, Ib=2mA	Vce(sat)	Max	500mV
Ic=20mA, Ib=2mA	Vbe(on)	Max	900mV
Static Forward Current Transfer Ratio			
Ic=1mA, Vce=10V	hFE1	Min	25
Ic=10mA, Vce=10V	hFE2	Min	40
Ic=30mA, Vce=10V	hFE3	Min	50
Current-Gain-bandwidth Product @Ic=10mA, Vce=20V, f=100MHz	fT	Min	50MHz
Output Capacitance @ Vcb=20V, f=1MHz	Cob	Max	3pF

Characteristics Curve

