

# UTCD45H2 PNP EXPITAXIAL SILICON TRANSISTOR

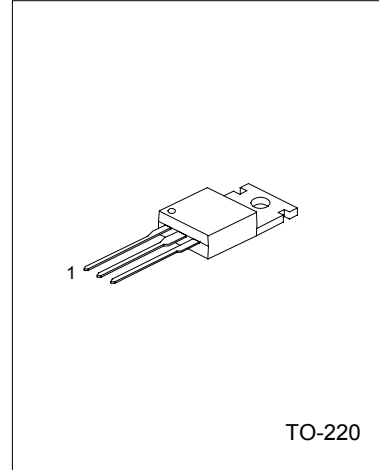
## PNP EXPITAXIAL SILICON TRANSISTOR

### DESCRIPTION

The UTC D45H2 is a general purpose power application and switching.

### FEATURE

- \*Low Collector-Emitter Saturation Voltage  
VCE(sat)=-1v(MAX)@-15A
- \*Fast Switching Speeds



1:BASE 2:COLLECTOR 3:EMITTER

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

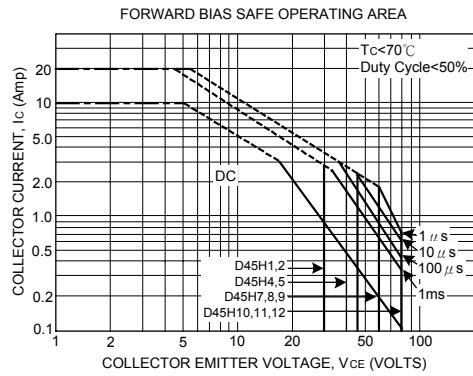
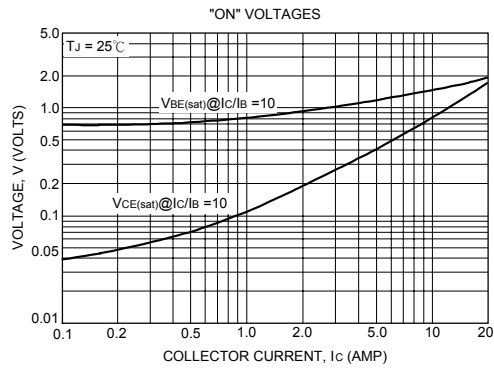
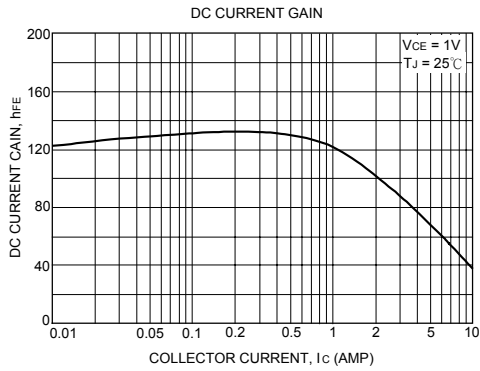
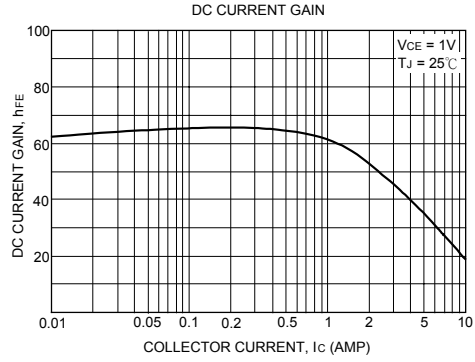
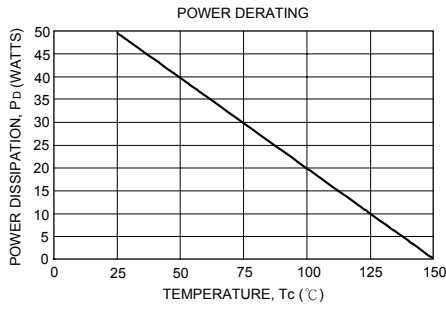
| PARAMETER                      | SYMBOL | VALUE      | UNIT |
|--------------------------------|--------|------------|------|
| Collector to Emitter Voltage   | VCEO   | -30        | V    |
| Emitter To Base Voltage        | VEBO   | -5         | V    |
| Collector Current(DC)          | IC     | -10        | A    |
| Collector Dissipation(Tc=25°C) | Pc     | 50         | W    |
| Collector Dissipation(Ta=25°C) | Pc     | 1.67       | W    |
| Junction Temperature           | Tj     | 150        | °C   |
| Storage Temperature            | Tstg   | -55 ~ +150 | °C   |

\*PW<=10mS,Duty Cycle<=50%

### ELECTRICAL CHARACTERISTICS(Ta=25°C)

| PARAMETER                            | SYMBOL   | TEST CONDITIONS        | MIN | TYP | MAX  | UNIT |
|--------------------------------------|----------|------------------------|-----|-----|------|------|
| Collector Cutoff Current             | ICES     | VCE=Rated ; VCEO,VEB=0 |     |     | -10  | μA   |
| Emitter Cutoff current               | IEBO     | VEB=-5V,IC=0           |     |     | 1    | μA   |
| Collector Emitter Saturation Voltage | VCE(SAT) | IC=-10A,IB=-0.1A       |     |     | -1   | V    |
| Base Emitter Saturation Voltage      | VBE(SAT) | IC=-10A,IB=-1A         |     |     | -1.5 | V    |
| DC Current Gain                      | hFE1     | IC=-10A,VCE=-1V        | 100 |     |      |      |
| Current Gain Bandwidth Product       | FT       | VCE=-10V,IC=-0.5A      |     | 40  |      | MHZ  |
| Output Capacitance                   | CCB      | VCB=-10V,f=1MHZ        |     | 230 |      | PF   |
| Turn On Time                         | ton      | IC=-5A,IB=-0.5A        |     | 135 |      | nS   |
| Storage Time                         | tstg     | IB=-0.5A               |     | 500 |      | nS   |
| Fall Time                            | tf       |                        |     | 100 |      | nS   |

TYPICAL CHARACTERISTICS



# UTC D45H2 PN-EPITAXIAL SILICON TRANSISTOR

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