SILICON PLASTIC POWER TRANSISTOR
NPN TIP41C
6A 65W

Technical Data

…designed for use in general-purpose switching and amplifier applications.

- Collector-Emitter Saturation Voltage-
  $V_{CE(sat)}$=1.5Vdc(Max)@I_C=6Adc
- Collector-Emitter Sustaining Voltage – V_{CEO}(sus) = 100 Vdc (Min)
- TO-220 Package

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Collector- Emitter Voltage	V_{CEO}	100	Vdc
Collector – Base Voltage	V_{CB}	100	Vdc
Emitter Base Voltage	V_{EB}	5	Vdc
Collector Current – Continuos Peak	I_C	6 10	Adc
Base Current	I_B	2	Adc
Total Power Dissipation @ TC = 25°C Derate above 25°C	PD	65 0.52	Watts W/°C
Operating and Storage junction Temperature Range	Tj,Tstg	-65 to +150	°C

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max.	Unit
Thermal resistance junction to case	R_{thjc}	1.92	°C/W

ISO 14001 CERTIFIED
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ELECTRICAL CHARACTERISTICS :[Tc = 25 °C unless otherwise noted]

Characteristic	Symbol	Min	Typ	Max	Unit
*** OFF CHARACTERISTICS :**					
Collector–Emitter Sustaining Voltage (1) [Ic =30mAdc, I_B = 0]	$V_{CEO(sus)}$	100			Vdc
Collector Cutoff Current [V_{CE} = 60 Vdc, I_B = 0]	I_{CE0}			0.7	mAdc
Collector Cutoff Current [V_{CE} =100 Vdc,V_{BE} = 0]	I_{CES}			400	✪Adc
Emitter Cutoff Current [V_{BE} =5.0 Vdc , Ic = 0]	I_{EBO}			1	mAdc
*** ON CHARACTERISTICS (1):**					
DC Current Gain [Ic =0.3 Adc , V_{CE} = 4.0 Vdc] [Ic = 3 Adc , V_{CE} = 4.0 Vdc]	h_{FE}	30 15		75	
Collector-Emitter Saturation Voltage [Ic = 6Adc , I_B = 600mAdc)	$V_{CE(sat)}$			1.5	Vdc
Base-Emitter on Voltage [Ic =6.0 Adc , V_{CE}= 4.0. V_{dc}]	$V_{BE(on)}$			2.0	Vdc
DYNAMIC CHARACTERISTICS :					
Current Gain – Bandwidth Product [Ic=0.5Adc,V_{CE}=10Vdc,ftest=1.0 MHz]	f_T	3			MHz
Small-Signal Current Gain [I_C= 0.5 Adc, V_{CE}=10 Vdc, f=1kHz]	hfe	20			

- Indicates within JEDEC Registration Data.
- (1) Pulse Test : Pulse Width <300μs , Duty Cycle < 2.0%