

T-33-05

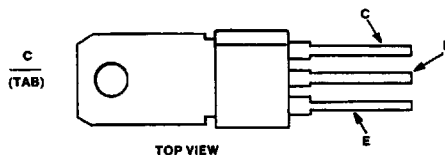
2-Ampere Silicon N-P-N Power Transistors

Complementary to the D41E Series

Features:

- High free-air power dissipation
- Low collector saturation voltage (0.5V typ. @ 1.0A I_C)
- Excellent linearity
- Fast switching

TERMINAL DESIGNATIONS



92CS-43222

JEDEC TO-202AB

POWER TRANSISTORS

The D40E-series of silicon n-p-n power transistors are designed for various specific and general purpose applications, such as: output and driver stages of amplifiers operating at frequencies from DC to greater than 1 MHz; series, shunt and switching regulators; and low and high frequency inverters/converters.

These devices are supplied in the JEDEC TO-202AB plastic package.

MAXIMUM RATINGS (T_A = 25° C) (unless otherwise specified)

RATING	SYMBOL	D40E1	D40E5	D40E7	UNITS
Collector-Emitter Voltage	V _{CEO}	30	60	80	Volts
Collector-Emitter Voltage	V _{CES}	45	70	90	Volts
Emitter Base Voltage	V _{EBO}	5	5	5	Volts
Collector Current — Continuous	I _C	2	2	2	A
Peak ⁽¹⁾	I _{CM}	3	3	3	
Base Current — Continuous	I _B	1	1	1	A
Total Power Dissipation @ T _A = 25° C	P _D	1.33	1.33	1.33	Watts
@ T _C = 25° C		8	8	8	
Operating and Storage Junction Temperature Range	T _J , T _{stg}	-55 to +150	-55 to +150	-55 to +150	°C

THERMAL CHARACTERISTICS

Thermal Resistance, Junction to Ambient	R _{θJA}	75	75	75	°C/W
Thermal Resistance, Junction to Case	R _{θJC}	15.6	15.6	15.6	°C/W
Maximum Lead Temperature for Soldering Purposes: 1/8" from Case for 5 Seconds	T _L	+260	+260	+260	°C

(1) Pulse Test Pulse Width = 300ms Duty Cycle ≤ 2%.