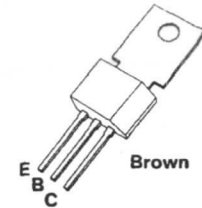


New Jersey Semi-Conductor Products, Inc.

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Silicon Power Tab Transistor



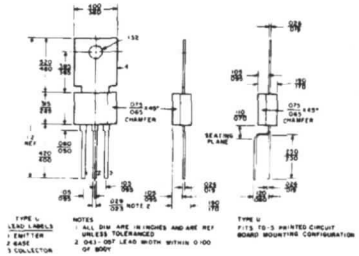
Leads can be formed to a TO-5 Pin Configuration.

FEATURING:

- **POWER-GLAS** Passivation
- High Free Air Power Dissipation
- Hard Solder Mountdown
- Fast Switching
- Brown for NPN

absolute maximum ratings: (25°C unless otherwise specified)

		D40P1	D40P3	D40P5	
Voltages	Collector to Emitter	V_{CE0}	120	180	225
	Emitter to Base	V_{EBO}	7	7	7
	Collector to Base	V_{CBO}	200	250	300
Current	Collector (Continuous)	I_C	0.5		Amp.
Power Dissipation	Tab at 25°C	P_T	6.25		Watts
	Tab at 70°C		4.0		Watts
	Free Air at 50°C		1.33		Watts
	Free Air at 50°C (without tab)		1.0		Watts
Thermal Resistance	Junction to Case	$R_{\theta JC}$	20		°C/W
	Junction to Ambient (with tab)	$R_{\theta JA}$	75		°C/W
	(without tab)		100		°C/W
Temperature	Operating	T_j	-55 to +150		°C
	Storage	T_{stg}	-55 to +150		°C
	Lead Soldering, 1/16" ± 1/32"	T_L			
	From case for 10 sec. max.		+260		°C



An insulating hardware kit (mica washer, nylon shoulder washer, and solder lug) is available at an additional cost upon request. Kit #138B8189P11.

Dimensional Outlines

electrical characteristics: (25°C unless otherwise specified)

		Min.	Max.	Units
Forward Current Transfer Ratio ($I_C = 80$ mA, $V_{CE} = 10$ V) ($I_C = 2$ mA, $V_{CE} = 10$ V)	h_{FE}	40	—	
		20	—	
Collector to Emitter Voltage ($I_C = 1.0$ mA, $I_B = 0$)	V_{CE0}	120	—	Volts
	D40P1	180	—	Volts
	D40P3	225	—	Volts
	D40P5			
Collector Cutoff Current (Rated V_{CE0})	I_{CBO}	—	10	μA
Emitter Cutoff Current ($V_{EBO} = 7$ V)	I_{EBO}	—	10	μA
Collector Saturation Voltage ($I_C = 100$ mA, $I_B = 10$ mA)	$V_{CE(SAT)}$	—	1	Volt
Base Saturation Voltage ($I_C = 100$ mA, $I_B = 10$ mA)	$V_{BE(SAT)}$	—	1.5	Volt
Gain Bandwidth Product ($I_C = 80$ mA, $V_{CE} = 10$ V)	f_T	50	—	MHz
Storage Time ($I_C(ON) = 80$ mA, $I_B(ON) = 8$ mA $I_B(OFF) = 8$ mA)	t_S	—	2.5	μsec
Collector Capacitance ($V_{CB} = 10$ V, $I_E = 0$)	C_{CB}	—	6	pf

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