

"BIG IDEAS IN
BIG POWER"
PowerTech
70 AMPERES

PT - 7501

PT-7502

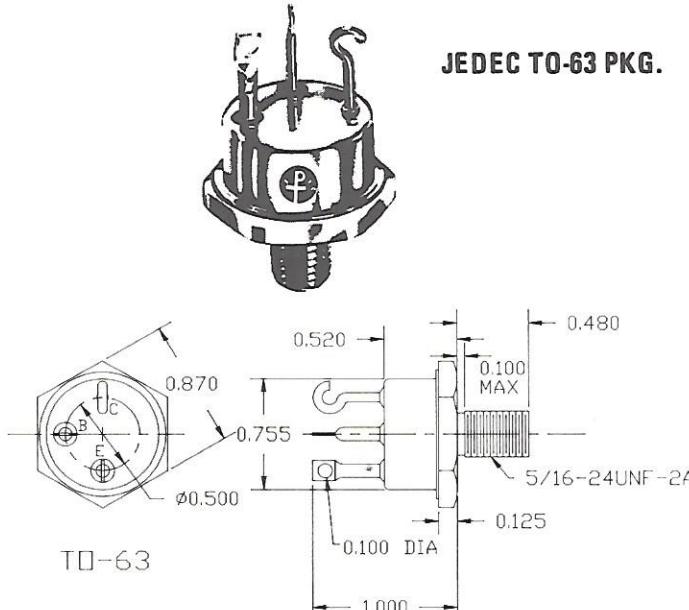
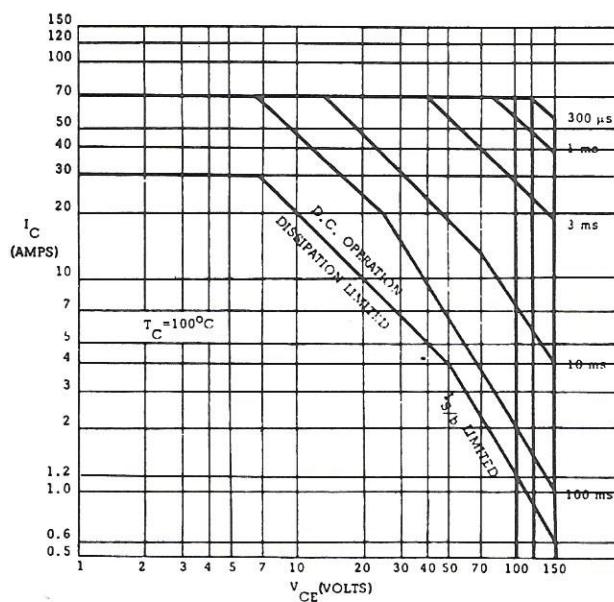
PT-7503

SILICON NPN TRANSISTOR

FEATURES:

$V_{CE(sat)}$	0.6 V @ 30 A	h_{FE}	5 min @ 70 A	$I_{S/b}$	1.2 A @ 100 V
V_{BE}	1.2 V @ 30 A	t_f	2 μ sec	$E_{S/b}$	6 Joules

SAFE OPERATING AREA



PowerTech's transistors offer high current capability, high breakdown voltage and the lowest available saturation voltage. They have exceptional resistance to both forward and reverse second breakdown. This unique combination of device characteristics makes them particularly suited for a wide variety of high current applications, which include series and switching regulators, motor controls, servoamplifiers and power control circuits. The transistors will provide outstanding performance when used as replacements for paralleled lower current devices, resulting in considerable reductions in weight, space and circuit complexity. Their reliability is assured through 100% power testing at 50V, 4A @ 100°C case temperature. These transistors exceed the requirements of MIL-S-19500 and are well suited for the most severe military-aerospace applications.

MAXIMUM RATINGS

Collector-Base Voltage	V_{CBO}	120V	150V	175V
Collector-Emitter Voltage	V_{CEO} (sus)	100V	120V	150V
Emitter-Base Voltage	V_{EBO}		10V	
Peak Collector Current	I_C		70A	
D.C. Collector Current	I_C		30A	
Power Dissipation @ 25°C	P_D		350W	
Power Dissipation @ 100°C	P_D		200W	
Thermal Resistance	θ_{J-C}		0.5° C/W	
Operating Temperature Range			-65 to 200°C	
Storage Temperature Range			-65 to 200°C	

SYMBOL

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