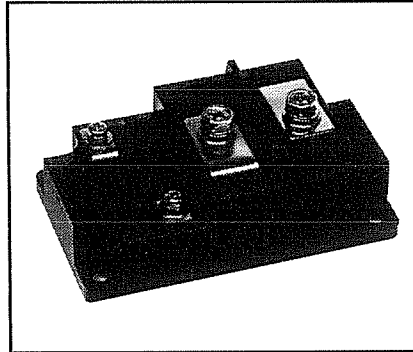
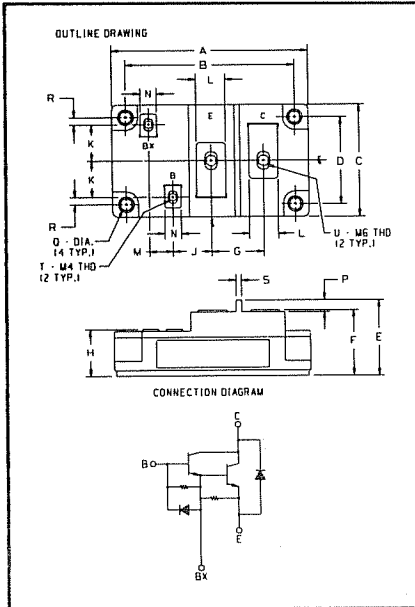


Powerex, Inc., Hillis Street, Youngwood, Pennsylvania 15697 (412) 925-7272  
 Powerex Europe, S.A., 428 Avenue G, Durand, BP107, 72003 Le Mans, France (43) 41.14.14

### Single Darlington Transistor Module 400 Amperes/600 Volts



**KS624540A41**  
**Single Darlington Transistor Module**  
 400 Amperes/600 Volts

**600 Volts, KS624540A41**  
**Outline Drawing**

Dimension	Inches	Millimeters
A	4.252 Max.	108 Max.
B	3.661 ± .012	93 ± 0.3
C	2.441 Max.	62 Max.
D	1.890 ± .012	48 ± 0.3
E	1.634 Max.	41.5 Max.
F	1.417 Max.	36 Max.
G	1.142	29
H	1.004	25.5 Max.
J	.827	21
K	.787	20
L	.630	16
M	.512	13
N	.354	9
P	.256	6.5
Q	.256 Dia.	6.5 Dia.
R	.157	4
S	.118	3
T	M4 Metric	M4
U	M6 Metric	M6

#### Description

Powerex Single Darlington Transistor Modules are designed for use in switching applications. The modules are isolated consisting of one Darlington Transistor with a reverse parallel connected high-speed diode and a base emitter speed up diode.

#### Features:

- Isolated Mounting
- Planar Chips
- Discrete Fast Recovery Feed-Back Diode
- High Gain ( $h_{FE}$ )
- Base Emitter Speed Up Diode

#### Applications:

- Inverters
- DC Motor Control
- Switching Power Supplies
- AC Motor Control
- Welders

#### Ordering Information

Example: Select the complete eleven digit module part number you desire from the table — i.e. KS624540A41 is a 450  $V_{CEO(SUS)}$  (600  $V_{CEV}$ ), 400 Ampere Single Darlington Module.

Type	$V_{CEO(SUS)}$ Volts (x10)	Current Rating Amperes (x10)
KS62	45	40



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KS624540A41

Single Darlington Transistor Module

400 Amperes/600 Volts

Maximum Ratings,  $T_C=25^\circ\text{C}$  unless otherwise specified

	Symbol	KS624540A41	Units
Junction Temperature	$T_J$	-40 to 150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-40 to 125	$^\circ\text{C}$
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	450	Volts
Collector-Emitter Sustaining Voltage $V_{BE} = -2V$	$V_{CEV(SUS)}$	600	Volts
Collector-Base Voltage	$V_{CBO}$	600	Volts
Emitter-Base Voltage	$V_{EBO}$	7	Volts
Collector-Emitter Voltage $V_{BE} = -2V$	$V_{CEV}$	600	Volts
Continuous Collector Current	$I_C$	400	Amperes
Diode Forward Current	$I_{FM}$	400	Amperes
Continuous Base Current	$I_B$	18	Amperes
Diode Surge Current	$I_{FSM}$	4000	Amperes
Power Dissipation	$P_T$	1380	Watts
Maximum Mounting Torque M6 Terminal Screws (E, C)	—	26	in.-lb.
Maximum Mounting Torque M4 Terminal Screws (B, Bx)	—	12	in.-lb.
Maximum Mounting Torque M6 Mounting Screws	—	26	in.-lb.
Module Weight	—	470	Grams
V Isolation	$V_{RMS}$	2500	Volts