

Overall	Heater		V <sub>A</sub> max V	P <sub>a</sub> W	Base Type	Pin Out	Mftrs. List No.
	Voltage V	Current A					
H Dia.							
56	22.2	6.3/12.6	0.3/0.15	300	1.0	B9A	○ ECC83
112	38.0	6.3	1.5	800	100	Octal	△ EL34
78	22.2	6.3	0.76	300	12	B9A	△ EL84
125	52.0	6.3	1.6	800	42	Octal	△ KT88
111	40.0	6.3	0.9	360	19	Octal	e △ 6L6GC
99	36.0	6.3	0.9	400	26	Octal	e △ 6L6GC/5881
86	38.0	5.0	1.9	2 550	—	Octal	f ◆ GZ34

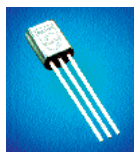
Application Codes: ○ = Audio pre-amplifier, mixer, oscillator, cathode follower  
 △ = Audio amplifier output stages  
 ◆ = Full-wave rectification in ac mains power supplies

SD304

Mftrs. List No.	Order Code	1+	10+	50+	Price Each
<b>Amplifier Valves</b>					
ECC83	.738-165				
EL34	.738-189				
EL84	.738-177				
KT88	.738-190				
6L6GC	.738-207				
6L6WGC/5881	.738-219				
<b>Rectifier Valves</b>					
GZ34	.738-220				
<b>Valve Bases – Chassis Mounting</b>					
B9A Chassis	.738-244	1+	10+	25+	50+
Octal Chassis	.331-764.				
<b>Valves Bases – PCB Mounting</b>					
B9A PCB	.738-256	1+	25+	100+	
Octal PCB	.331-790.				

## Thyristors

### Thyristors



TO-92

- High reliability glass mesa and planar technologies
- Glass passivated, where applicable, for stable voltage blocking beyond 125°C
- Reduces % rating to eliminate MT2 to MT1 false triggering
- High reliability
- Snubbers and % limiting inductors can be eliminated

IT (rms) (A)	Voltage Grades	IGT (max) (µA)	T092 (SOT54)
0.8	200	200	BT169
0.8	200/400	200	BT149
0.8	500/600	200	BT168

SD493

I <sub>T</sub> A	V <sub>rrm</sub> V	Mftrs. List No.	Order Code	1+	25+	100+	250+	1K+
0.8	200	BT149B	.316-3167					
0.8	400	BT149D	.316-3179					
0.8	600	BT168G	.316-3210					
0.8	200	BT169B	.316-3222					
0.8	500	BT168E	.316-3209					

### Thyristors and Triacs

### Philips Semiconductors



SOT-223



D²-PAK



SOT-82



SOT-186A



TO-220AB



TO-92

- High reliability glass mesa and planar technologies
- Glass passivated, where applicable, for stable voltage blocking beyond 125°C
- High reliability
- SMD package options for optimised PCB size and reduce assembly costs
- Logic level and sensitive gate triacs can be driven directly by low power ICs
- 3 Quadrant Triacs offer enhanced dV<sub>o</sub>/dt, dV<sub>com</sub>/dt and dI<sub>com</sub>/dt capabilities
- Snubbers and dI/dt limiting inductors can be eliminated

#### FOUR-QUADRANT TRIACS

IT (R <sub>MS</sub> ) (A)	VOLTAGE GRADES (V)	I <sub>GT</sub> (max.) (µA)	PACKAGE				
			SOT223	D²-PAK (SOT404)	SOT82	SOT186A (isolated TO220AB)	TO220AB (SOT78)
1	500 / 600 / 800	D*/E	BT134W				
4	500 / 600 / 800	D*/E			BT134		
4	500 / 600 / 800	D*/E/F			BT136B		BT136
8	500 / 600 / 800	D*/E/F			BT137B		BT137
12	500 / 600 / 800	E/F			BT138B		BT138
16	500 / 600 / 800	E/F			BT139B		BT139
25	500 / 600 / 800	—			BTA140B		BTA140

#### THREE-QUADRANT TRIACS

8	500 / 600 / 800	B					BTA208
12	500 / 600 / 800	B					BTA212
16	500 / 600 / 800	B					BTA216
25	500 / 600 / 800	B					BTA225

#### THYRISTORS

IT (R <sub>MS</sub> ) (A)	VOLTAGE GRADES (A)	I <sub>GT</sub> (max.) (µA)	PACKAGE			
			SOT223	T092 (SOT54)	SOT82	TO220AB (SOT78)
0.8	200 / 400 / 500 / 600	200µA		BT169		
0.8	200 / 400 / 500 / 600	200µA		BT149		
1	400 / 500 / 600	200µA	BT148W			
4	400 / 500 / 600	200µA			BT148	
8	500 / 600 / 800	15mA				BT300
12	500 / 650 / 800	15mA				BT151
12	500 / 650	4mA			BTA151	
20	400 / 600 / 800	32mA				BT152

#### DIAC

I <sub>FRM</sub> (A)	V <sub>BO</sub> (V)	I <sub>BO</sub> (µA)	PACKAGE	TYPICAL APPLICATIONS
			SOD27	Home Appliances
2	28 – 36	50	BR100/03	

\* 'D' version Triacs are only available in 500 & 600V range

BT149 has reversed pinning to BT169

SD64 / SD64A

#### Order Multiple=5

Mftrs. List No.	Order Code	5+	25+	100+	250+	1K+
BR100/03	.363-480					

#### Order Multiple=1

Mftrs. List No.	Order Code	5+	25+	100+	250+	1K+
BT134-600	.163-533					
BT134-600D	.305-0592					
BT134-800	.163-545					
BT134-800E	.305-0609					
BT134W-600	.163-570 †					
BT134W-600D	.305-0622					
BT134W-800	.163-600					
BT136-500	.363-510					
BT136-600	.363-522					
BT136-800	.936-224					
BT136B-600	.936-273					
BT137-500G	.305-0634					
BT137-600	.363-546					
BT137-600D	.302-3680					
BT137-600F	.305-0646					
BT137B-600	.936-285					
BT138-500	.363-558 †					
BT138-600	.363-560					
BT138-800	.936-248					
BT138B-600	.936-297					
BT138X-600	.305-0658					
BT139-600	.363-583					
BT139-800	.936-250					
BT139B-600	.936-303					
BT148-400R	.305-0660					
BT148W-400R	.305-0671					
BT149E	.305-0683					
BT151-500R	.362-578					
BT151-650R	.362-580					
BT151-800R	.362-591					
BT151F-650R	.305-0695					
BT152-400R	.362-608					
BT152-600R	.362-610					
BT152-800R	.362-621					
BT169G	.163-697					
BT300-600R	.302-3321					
BTA140-500	.163-703					
BTA140-600	.363-753					
BTA140-800	.936-261					
BTA140B-600	.936-315					
BTA151-650R	.305-0701					
BTA208-800B	.936-364 †					
BTA212-600B	.936-339					
BTA216-800B	.936-388					
BTA225-600B	.936-352					

† Available until stocks are exhausted

Continued