

BGY 15

SILICON PLANAR NPN

MEDIUM-CURRENT TRANSISTOR ARRAY

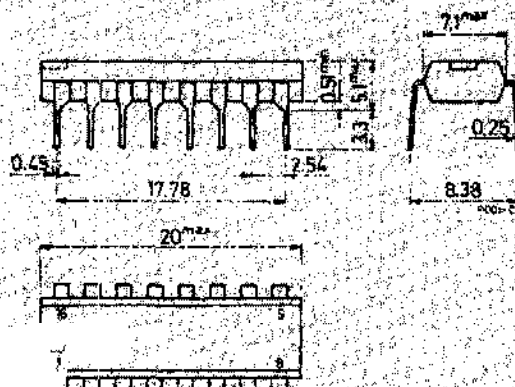
The BGY 15 is an assembly of seven isolated silicon planar epitaxial NPN transistors in a 16-lead dual in-line plastic package, intended for industrial and general purpose applications.

ABSOLUTE MAXIMUM RATINGS

V_{CBO}	Collector-base voltage ($I_E = 0$)	40	V
V_{CEO}	Collector-emitter voltage ($I_B = 0$)	40	V
V_{EBO}	Emitter-base voltage ($I_C = 0$)	6	V
P_{tot}	Total power dissipation at $T_{amb} \leq 25^\circ\text{C}$	0.8	W
T_{stg}, T_j	Storage and junction temperature	-55 to 150	$^\circ\text{C}$

MECHANICAL DATA

Dimensions in mm



THERMAL DATA

$R_{th\ J-amb}$	Thermal resistance junction-ambient	max	156 °C/W
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ELECTRICAL CHARACTERISTICS ($T_{amb} = 25^{\circ}C$ unless otherwise specified)

Parameter	Test conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector cutoff current ($I_E = 0$)			150	nA
$V_{(BR)CBO}$	Collector-base breakdown voltage ($I_E = 0$)	40			V
$V_{CEO(sus)}$ *	Collector-emitter sustaining voltage ($I_B = 0$)	40			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage ($I_C = 0$)	6			V
$V_{CE(sat)}$ *	Collector-emitter saturation voltage	$I_C = 10\text{ mA}$	$I_B = 1\text{ mA}$	0.25	V
$V_{BE(sat)}$ *	Base-emitter saturation voltage	$I_C = 10\text{ mA}$	$I_B = 0.5\text{ mA}$	0.9	V
h_{FE}	DC current gain	$I_C = 2\text{ mA}$ $I_C = 50\text{ mA}$	$V_{CE} = 5\text{ V}$ $V_{CE} = 5\text{ V}$	100 80	— —
t_{on}	Turn-on time	$I_C = 10\text{ mA}$	$I_{B1} = 1\text{ mA}$	150	ns
t_{off}	Turn-off time	$I_C = 10\text{ mA}$	$I_{B1} = -I_{B2} = 1\text{ mA}$	900	ns

* Pulsed: pulse duration = 300 μ s, duty cycle = 1%

SCHEMATIC DIAGRAM

