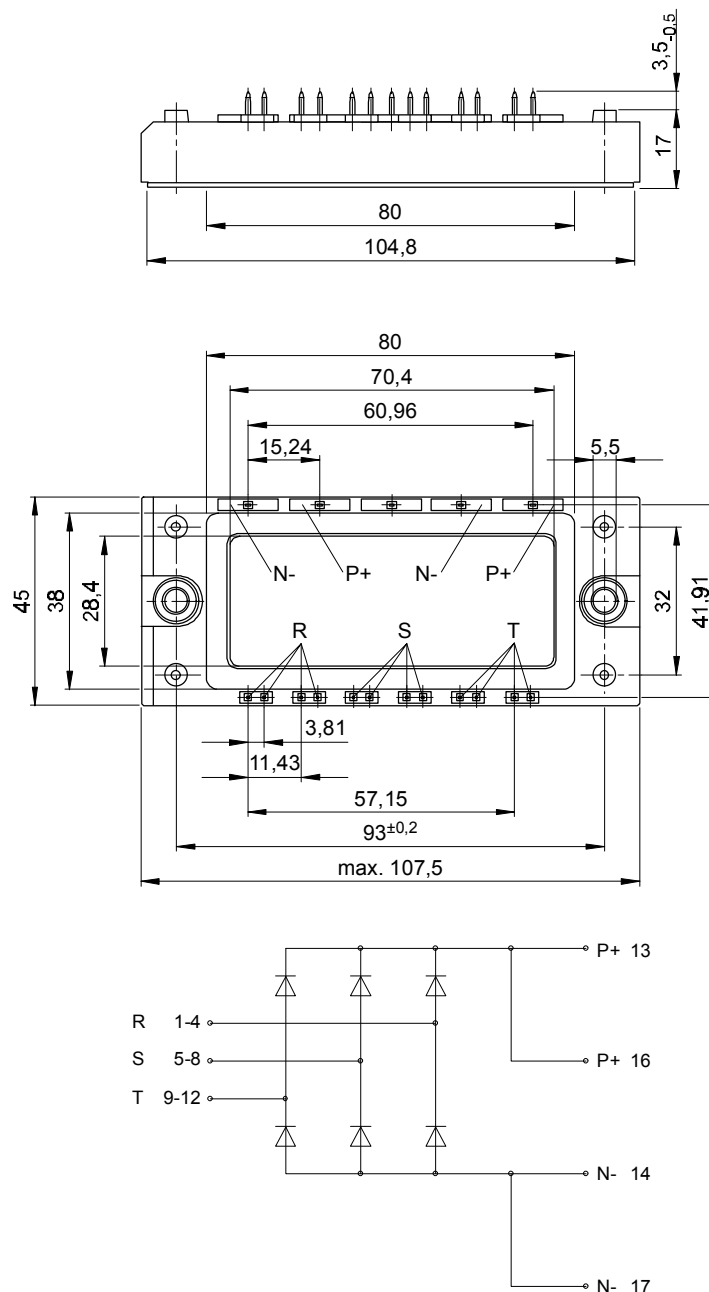




European Power-Semiconductor and Electronics Company GmbH + Co. KG

# Marketing Information

## DD B6U 100 N 10...16..R (ECONO)



VWK Sep. 1996

# DD B6U 100 N 10...16..R (ECONO)

## Elektrische Eigenschaften / Electrical properties

### Höchstzulässige Werte / Maximum rated values

Periodische Spitzensperrspannung repetitive peak reverse voltage	$T_{vj} = -40^{\circ}\text{C} \dots T_{vj \text{ max}}$	$V_{RRM}$	1000, 1200 V 1400, 1600 V
Stoßspitzensperrspannung non-repetitive peak reverse voltage	$T_{vj} = +25^{\circ}\text{C} \dots T_{vj \text{ max}}$	$V_{RSM}$	1100, 1300 V 1500, 1700 V
Durchlaßstrom-Grenzeffektivwert (pro Element) RMS forward current (per chip)		$I_{FRMSM}$	60 A
output current	$T_C = 100^{\circ}\text{C}$ $T_C = 97^{\circ}\text{C}$ $T_A = 45^{\circ}\text{C}, \text{KP } 0,5 \text{ S}$ $T_A = 45^{\circ}\text{C}, \text{KP } 0,33 \text{ S}$ $T_A = 35^{\circ}\text{C}, \text{KP } 0,41 \text{ S } (V_L = 45\text{l/s})$ $T_A = 35^{\circ}\text{C}, \text{KP } 0,33 \text{ S } (V_L = 90\text{l/s})$	$I_d$	100 A 104 A 58 A 75 A 104 A 104 A
Stoßstrom-Grenzwert surge forward current	$T_{vj} = 25^{\circ}\text{C}, t_p = 10\text{ms}$	$I_{FSM}$	650 A
Grenzlastintegral $I^2t$ -value	$T_{vj} = T_{vj \text{ max}}, t_p = 10\text{ms}$ $T_{vj} = 25^{\circ}\text{C}, t_p = 10\text{ms}$ $T_{vj} = T_{vj \text{ max}}, t_p = 10\text{ms}$	$I^2t$	550 A 2100 A <sup>2</sup> s 1500 A <sup>2</sup> s

### Charakteristische Werte / Characteristic values

Durchlaßspannung forward voltage	$T_{vj} = T_{vj \text{ max}}, I_F = 100\text{A}$	$V_F$	max. 1,55 V
Schleusenspannung threshold voltage	$T_{vj} = T_{vj \text{ max}}$	$V_{(TO)}$	0,75 V
Ersatzwiderstand forward slope resistance	$T_{vj} = T_{vj \text{ max}}$	$r_T$	5,5 mW
Sperrstrom reverse current	$T_{vj} = T_{vj \text{ max}}, V_R = V_{RRM}$	$i_R$	max. 5 mA
Isolations-Prüfspannung insulation test voltage	RMS, f = 50Hz, t = 1min RMS, f = 50Hz, t = 1sec	$V_{ISOL}$	2,5 kV 3,0 kV

## Thermische Eigenschaften / Thermal properties

Innerer Wärmewiderstand thermal resistance, junction to case	pro Modul / per module, $Q = 120^{\circ}\text{rect}$ pro Element / per chip, $Q = 120^{\circ}\text{rect}$ pro Modul / per module, DC pro Element / per chip, DC	$R_{thJC}$	max. 0,191 °C/W max. 1,150 °C/W max. 0,147 °C/W max. 0,880 °C/W
Übergangs-Wärmewiderstand thermal resistance, case to heatsink	pro Modul / per module pro Element / per chip	$R_{thCK}$	max. 0,033 °C/W max. 0,200 °C/W
Höchstzul. Sperrschichttemp. max. junction temperature		$I_{vj \text{ max}}$	150 °C
Betriebstemperatur operating temperature		$T_{c \text{ op}}$	- 40...+150 °C
Lagertemperatur storage temperature		$T_{stg}$	- 40...+150 °C

## Mechanische Eigenschaften / Mechanical properties

Gehäuse, siehe Anlage case, see appen			
Innere Isolation internal insulation			$\text{Al}_2\text{O}_3$
Anzugsdrehm.f.mech.Befestig. mounting torque	Toleranz / tolerance $\pm 15\%$	M1	4 Nm
Gewicht weight		G	typ. 185 g
Kriechstrecke creepage distance			12,5 mm
Schwingfestigkeit vibration resistance			50 m/s <sup>2</sup>
Kühlkörper / heatsinks :			

## **Terms & Conditions of Usage**

### **Attention**

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