

## 3~phase

### DBI 15

#### Preliminary Data

#### Features

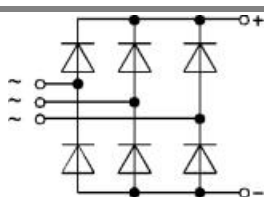
- In-line isolated metal case with wired connectors
- Blocking voltage to 1600V
- High surge current
- Easy mounting
- UL recognized, file no. E 63 532

#### Typical Applications

- Three phase rectifier for power supplies
- Input rectifier for variable frequency drives
- Rectifier for DC motor field supplies
- Battery charger
- Recommended snubber network:  
RC: 50Ω, 0,1μF

$V_{RSM}, V_{RRM}$ V	$V_{VRMS}$ V	$I_D = 15 \text{ A } (T_A = 50 \text{ }^\circ\text{C})$ Types	$C_{max}$ μF	$R_{min}$ Ω
200	60	DBI 15/02	18000	0,15
400	125	DBI 15/04	8700	0,3
600	185	DBI 15/06	6000	0,5
800	250	DBI 15/08	4300	0,7
1000	310	DBI 15/10	3500	0,85
1200	380	DBI 15/12	2800	1

Symbol	Conditions	Values	Units
$I_D$	$T_a = 50 \text{ }^\circ\text{C}$ , isolated	3,5	A
	$T_a = 50 \text{ }^\circ\text{C}$ , P1A/120	15	A
$I_{DCL}$	$T_a = 50 \text{ }^\circ\text{C}$ , isolated	3,5	A
	$T_a = 50 \text{ }^\circ\text{C}$ , P1A/120	15	A
	$T_a = \text{ }^\circ\text{C}$ ,		A
$I_{FSM}$	$T_{vj} = 25 \text{ }^\circ\text{C}$ , 10 ms	250	A
	$T_{vj} = 150 \text{ }^\circ\text{C}$ , 10 ms	215	A
$i^2t$	$T_{vj} = 25 \text{ }^\circ\text{C}$ , 8,3 ... 10 ms	310	A <sup>2</sup> s
	$T_{vj} = 150 \text{ }^\circ\text{C}$ , 8,3 ... 10 ms	230	A <sup>2</sup> s
$V_F$	$T_{vj} = 25 \text{ }^\circ\text{C}$ , $I_F = 7,5 \text{ A}$	max. 1,1	V
$V_{(TO)}$	$T_{vj} = 150 \text{ }^\circ\text{C}$	max. 0,9	V
$r_T$	$T_{vj} = 150 \text{ }^\circ\text{C}$	max. 12	mΩ
$I_{RD}$	$T_{vj} = 25 \text{ }^\circ\text{C}$ , $V_{RD} = V_{RRM} = 1600 \text{ V}$	300	μA
	$T_{vj} = \text{ }^\circ\text{C}$ , $V_{RD} = V_{RRM} \geq V$		μA
$I_{RD}$	$T_{vj} = 150 \text{ }^\circ\text{C}$ , $V_{RD} = V_{RRM} = 1600 \text{ V}$	5	mA
	$T_{vj} = \text{ }^\circ\text{C}$ , $V_{RD} = V_{RRM} \geq V$		mA
$t_{rr}$	$T_{vj} = 25 \text{ }^\circ\text{C}$	10	μs
$f_G$		2000	Hz
$R_{th(j-a)}$	isolated	8	K/W
	chassis	5,1	K/W
$R_{th(j-c)}$	total	4,1	K/W
$R_{th(c-s)}$	total	0,15	K/W
$T_{vj}$		-50...+125	°C
$T_{stg}$		-50...+150	°C
$V_{isol}$	a.c. 50..60Hz; r.m.s.; 1s/1min	3000/2500	V~
$M_s$	to heatsink	2±10%	Nm
$M_t$			Nm
$a$			m/s <sup>2</sup>
$w$		35	g
$F_u$		40	A
Case			



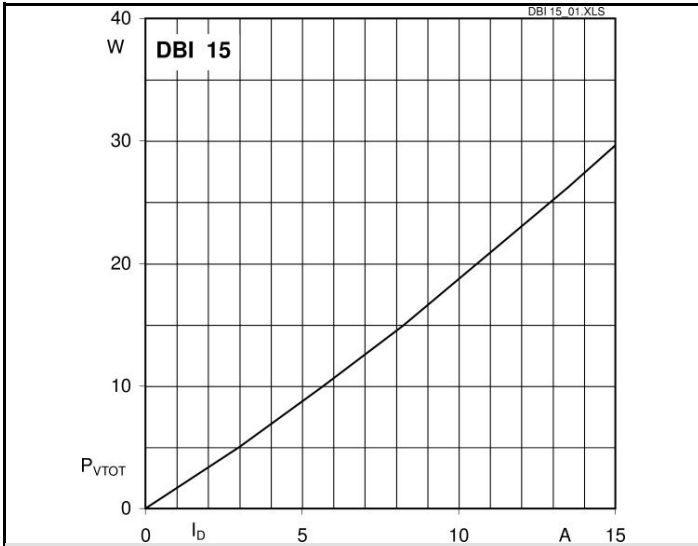


Fig. 3L Power dissipation vs. output current

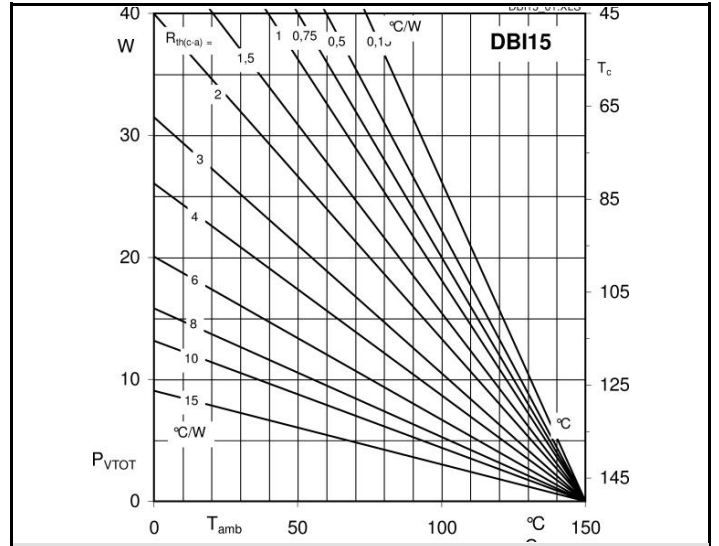


Fig. 3R Power dissipation vs. case temperature

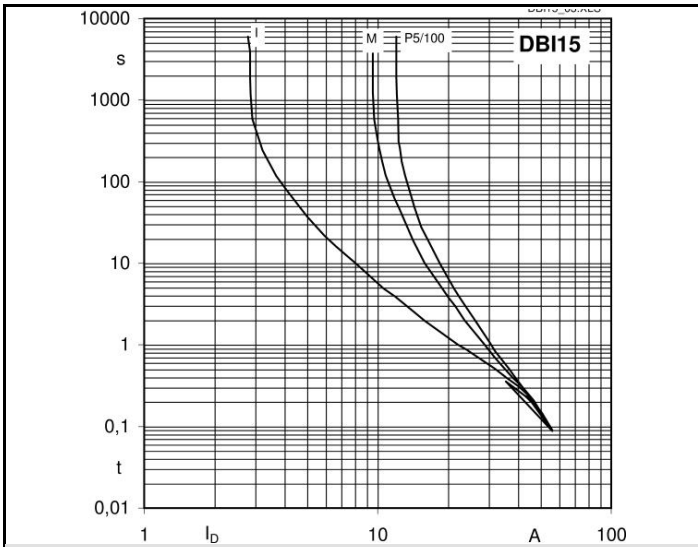


Fig. 6 Rated overload characteristics vs. time

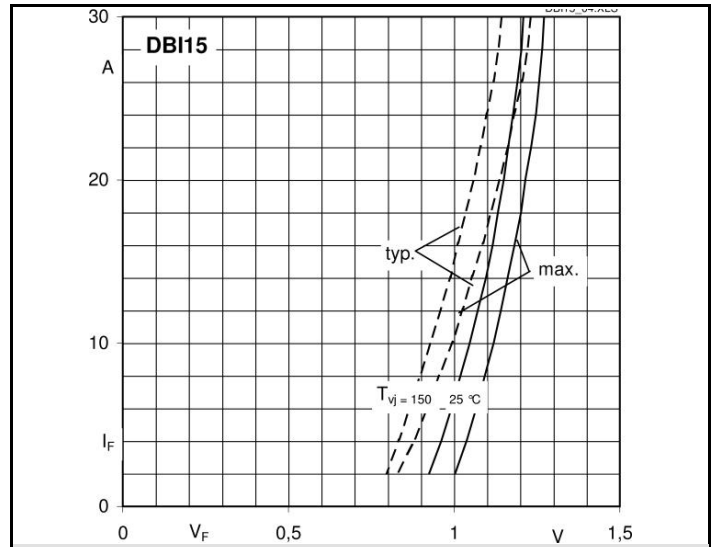
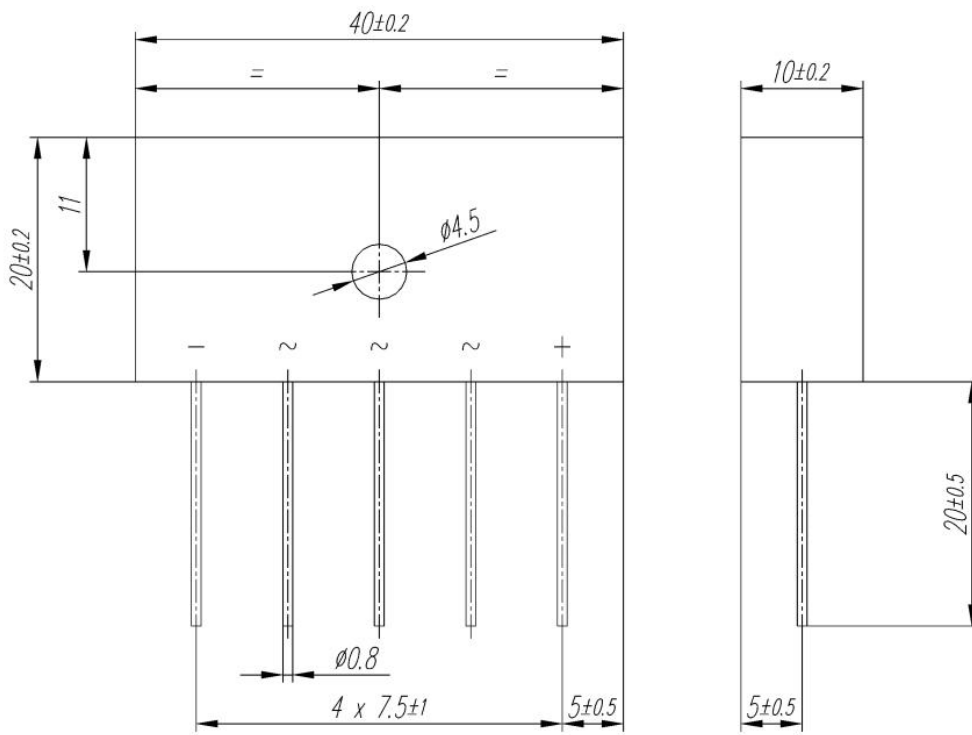


Fig. 9 Forward characteristics of a diode arm



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