Moulded Module Assembly

PBD 25

(Diode - Diode Module)

Technical Data

Typical applications : Non Controllable rectifiers for AC/AC convertors, Field supply for DC motors, Line rectifiers for transistorized AC motor controllers.

Type No.	V_{RRM} (Volts)	V_{RSM} (Volts)
PBD 25/04	400	500
PBD 25/06	600	700
PBD 25/08	800	900
PBD 25/10	1000	1100
PBD 25/12	1200	1300
PBD 25/14	1400	1500
PBD 25/16	1600	1700

Features

- Heat transfer through ceramic isolated Cu base
- Isolation between contacts & mounting base is 2.5KV(rms)
- Weight 120 gm (Approx)

Symbol	Conditions	Values
$I_{F(AV)}$	Sin 180 ;Tcase = 93 ˚C	25 A
I_{FSM}	Tvj = 25 ˚C; Half Sine; 10 ms; 0 V_{RRM}	550 A
	Tvj = 125 ˚C; Half Sine; 10 ms; 0 V_{RRM}	480 A
I^2t	Tvj = 25 ˚C; Half Sine; 10 ms	1500 A^2s
	Tvj = 125 ˚C; Half Sine; 10 ms	1150 A^2s
V_F	Tvj = 25 ˚C ; I_F = 75 A	1.35V max
V_O	Tvj = 125 ˚C	0.85V
R_0	Tvj = 125 ˚C	6.0 mΩ
I_{DRM}	Tvj = 125 ˚C	5 mA max
$R_{th(j-c)}$	per diode / per module	1.0/0.5 ˚C/W
$R_{th(c-h)}$	per diode / per module	0.20/0.10 ˚C/W
T_{vj}		+ 125 ˚C
T_{stg}		-40.....+ 125 ˚C
V_{ISOL}	A.C. 50 Hz: r.m.s.; 1sec	3.0 KV
	A.C. 50 Hz: r.m.s.; 1min	2.5 KV

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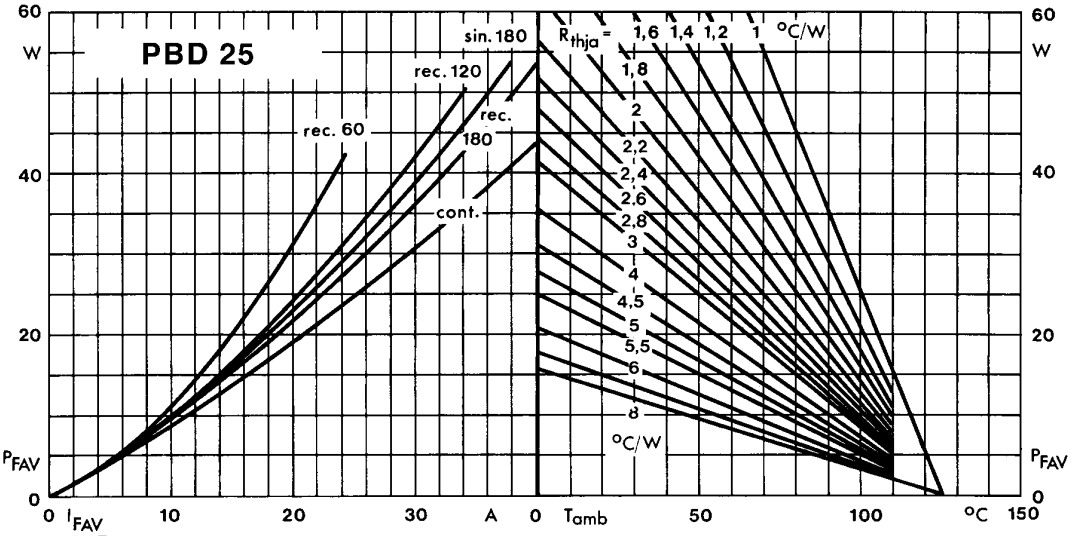
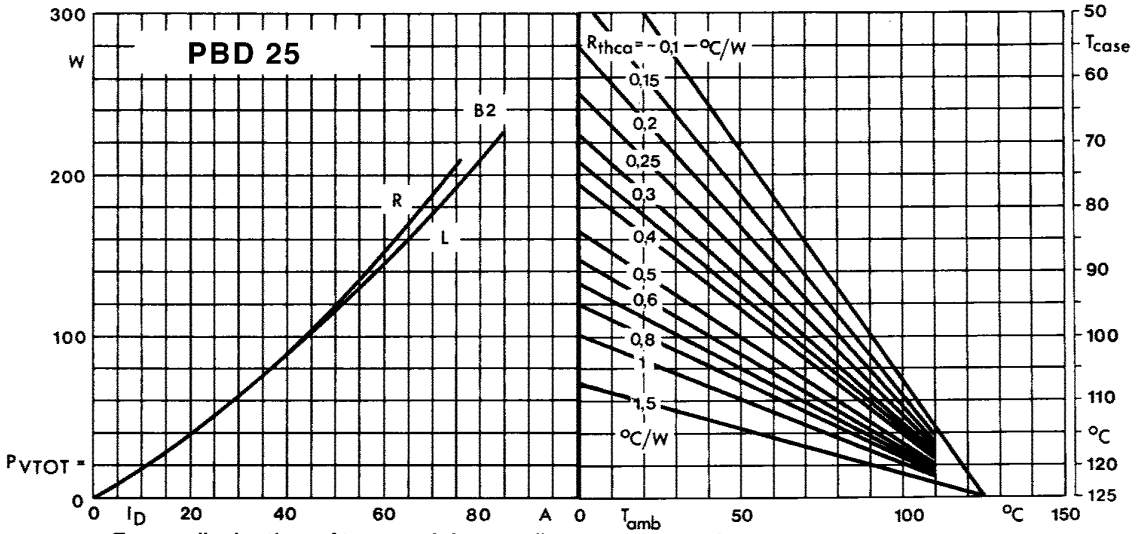
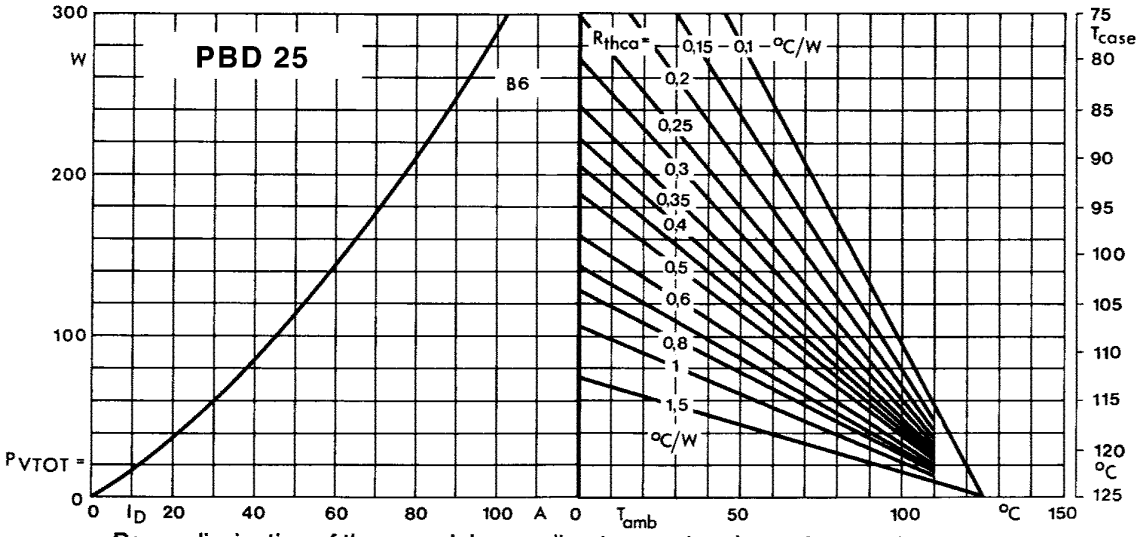


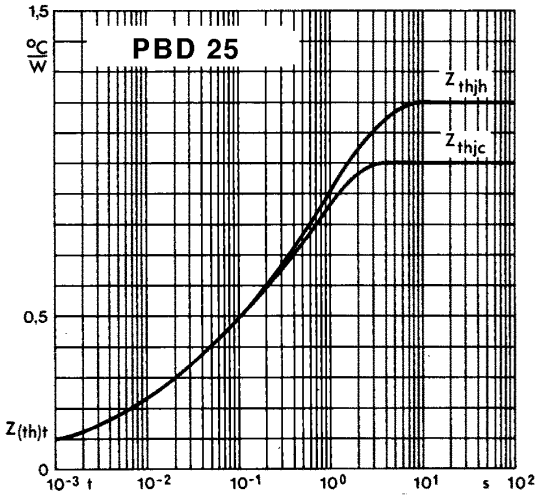
Power dissipation per diode vs. forward current and ambient temperature



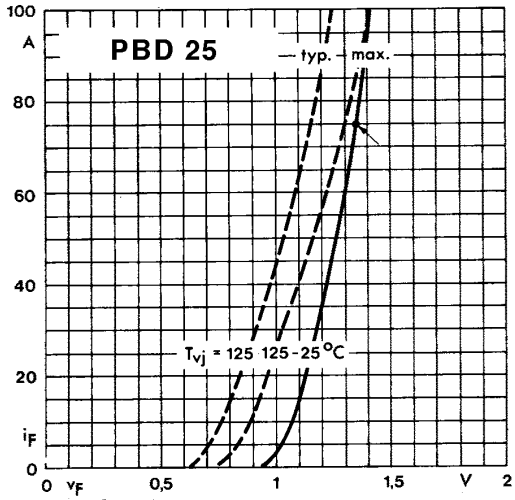
Power dissipation of two modules vs. direct current and case temperature



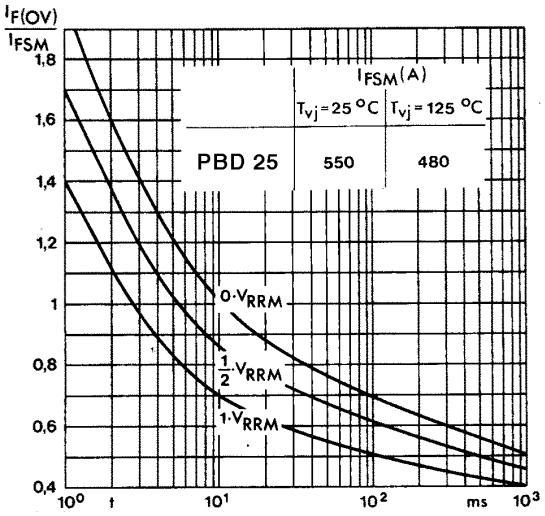
Power dissipation of three modules vs. direct current and case temperature



Transient thermal impedance vs. time

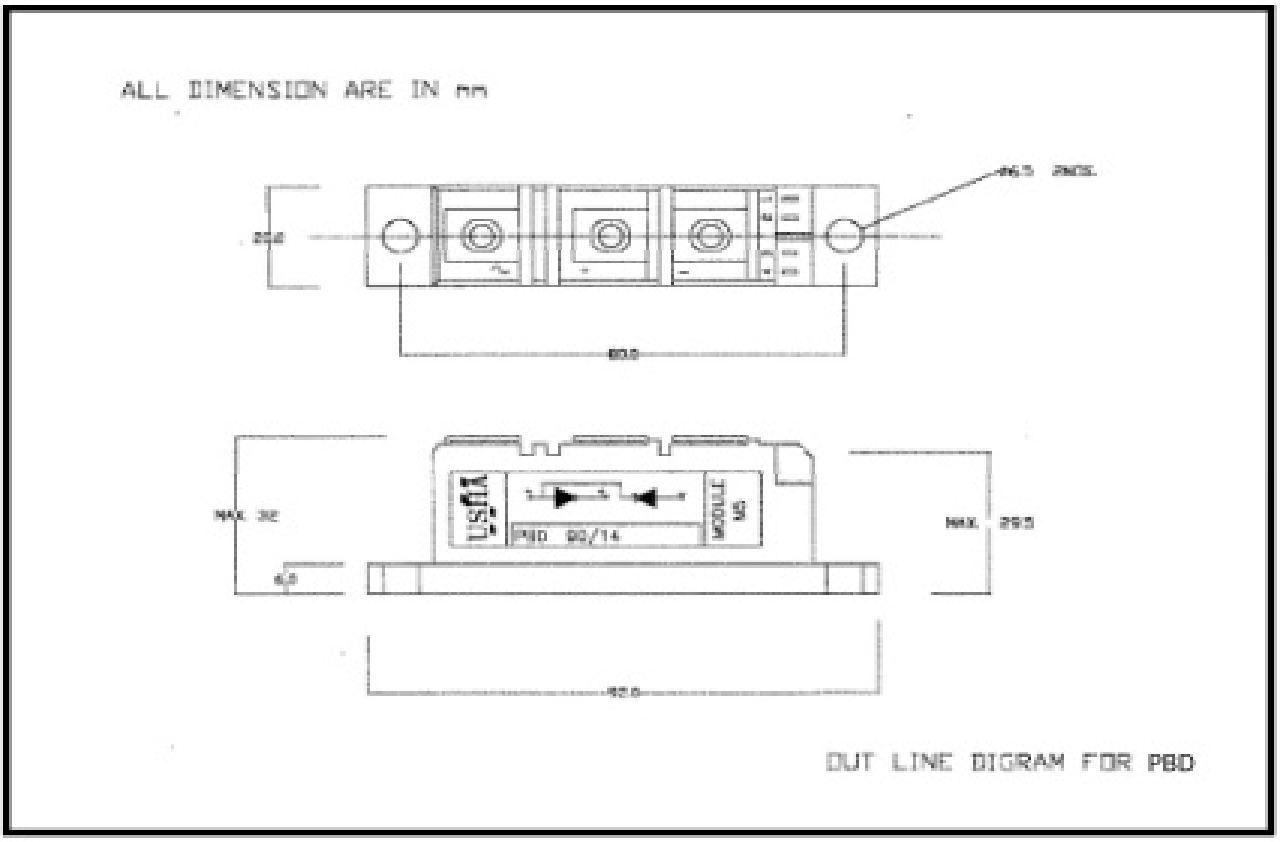


Forward characteristics



Surge overload current vs. time

MECHANICAL DETAILS



ALL DIMENSIONS IN MM
MOUNTING TORQUE CASE TO HEAT SINK = 5 N.M.
MOUNTING TORQUE BUSBARS TO TERMINALS = 3N.M.

MOUNTING INSTRUCTIONS

- GREASE THE BASE PLATE WITH HEAT SINK COMPOUND BEFORE USE.
- MOUNTING TORQUE NOT TO EXCEED 4Nm FOR BOTH THE BOLTS.
- USE ONLY M5 SCREWS.