

SILICON BRIDGE RECTIFIERS

Ready for use full-wave bridge rectifiers in a plastic encapsulation. The bridges are intended for use in equipment supplied from a.c. with r.m.s. voltages up to 420 V and are capable of delivering output currents up to 25A. They may be used in free air or on a heatsink.

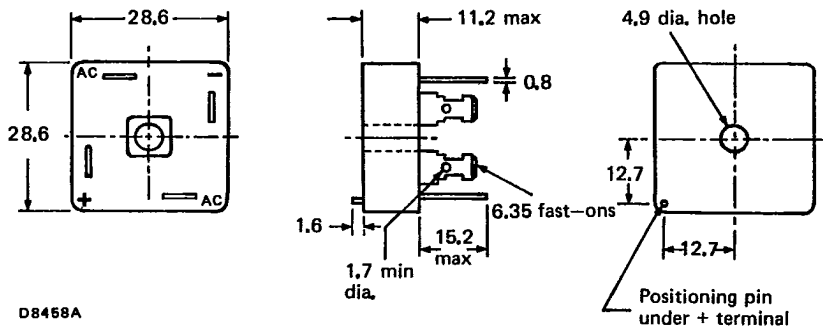
QUICK REFERENCE DATA

Input		BY261-200	400	600	
R.M.S. voltage	$V_I(\text{RMS})$	max. 140	280	420	V
Repetitive peak voltage	V_{IRM}	max. 200	400	600	V
Non-repetitive peak current	I_{ISM}	max.	320		A
Peak inrush current	I_{IIM}	max.	640		A
Output					
Average current	$I_O(\text{AV})$	max.	25		A

MECHANICAL DATA

Dimensions in mm

Fig. 1



D8468A

RATINGS

Limiting values in accordance with the Absolute Maximum System (IEC134).

Input		BY261-200			400	600	
Non-repetitive peak voltage ($t \leq 10$ ms)	V_{ISM}	max.	200	400	600	V	
Repetitive peak voltage	V_{IRM}	max.	200	400	600	V	
Crest working voltage	V_{IWM}	max.	200	400	600	V	
R.M.S. voltage (sine-wave)	$V_{I(RMS)}$	max.	140	280	420	V	
Non-repetitive peak current							
half sinewave; $t = 20$ ms; with reapplied V_{IWMmax}							
$T_j = 25$ °C prior to surge	I_{ISM}	max.		320		A	
$T_j = 150$ °C prior to surge	I_{ISM}	max.		250		A	
Peak inrush current (see Fig. 5)	I_{IIM}	max.		640		A	
Output							
Average current (averaged over any 20 ms period)							
heatsink operation; up to $T_{mb} = 55$ °C (R-load)							
	$I_{O(AV)}$	max.		25		A	
heatsink operation; up to $T_{mb} = 55$ °C (C-load)							
	$I_{O(AV)}$	max.		18		A	
Repetitive peak current	I_{ORM}	max.		75		A	
Temperatures							
Storage temperature	T_{stg}			-55 to +175		°C	
Junction temperature	T_j	max.		175		°C	
THERMAL RESISTANCE							
From junction to mounting base	$R_{th j-mb}$	=		2.5		°C/W	
CHARACTERISTICS							
Forward voltage (2 diodes in series)							
$I_F = 12$ A; $T_j = 25$ °C	V_F	<		2.3		V*	
Reverse current (2 diodes in parallel)							
$V_R = V_{IWMmax}$; $T_j = 100$ °C	I_R	<		200		μA	

*Measured under pulse conditions to avoid excessive dissipation.