YW1074YC200

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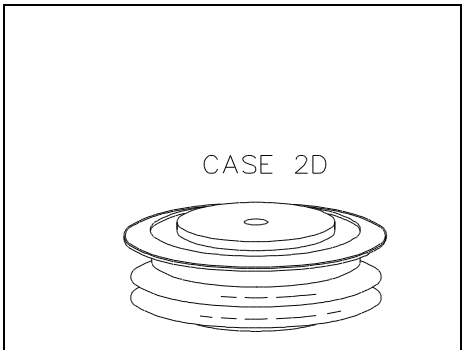
GENERAL PURPOSE HIGH POWER STANDARD RECTIFIER



Features:

- **. All Diffused Structure**
- **. High Surge rating**
- **. Soft Reverse Recovery**
- **. Rugged Ceramic Hermetic Package**
- **. Pressure Assembled Device**

ELECTRICAL CHARACTERISTICS AND RATINGS

Reverse Blocking

Device Type	V_{RRM} (1)	V_{RSM} (1)
YW1074YC200	2000	2100

V_{RRM} = Repetitive peak reverse voltage
V_{RSM} = Non repetitive peak reverse voltage (2)

Repetitive peak reverse leakage	I_{RRM}	10 mA 35 mA (3)

Notes:
All ratings are specified for Tj=25 ºC unless otherwise stated.
(1) All voltage ratings are specified for an applied 50Hz/60zHz sinusoidal waveform over the temperature range -40 to +185 ºC.
(2) 10 msec. max. pulse width
(3) Maximum value for Tj = 185 ºC.
(4) See parameter definition below :

Conducting - on state

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Average value of on-state current	$I_{F(AV)}$		600		A	Sinewave,180° conduction,T_c =115°C
RMS value of on-state current	I_{FRMS}		940		A	Nominal value
Peak one cycle surge (non repetitive) current	I_{FSM}		5550 5200		A A	8.3 msec (60Hz), sinusoidal wave-shape, 180° conduction, T_j = 185 °C 10.0 msec (50Hz), sinusoidal wave-shape, 180° conduction, T_j = 185 °C
I square t	I^2t		255000		A^2s	8.3 msec and 10.0 msec
Peak on-state voltage	V_{FM}		2.13		V	I_{FM} = 3090 A;
Reverse Recovery Current (4)	$I_{RM(REC)}$		100		A	I_{FM} = 1000 A; dI_F/dt = 10 A/µs;Tjmax
Reverse Recovery Charge (4)	Q_{rr}		450		µC	I_{FM} = 1000 A; dI_F/dt = 10 A/µs;Tjmax
Reverse Recovery Time (4)	t_{RR}		*		µs	

* For guaranteed maximum values, contact factory

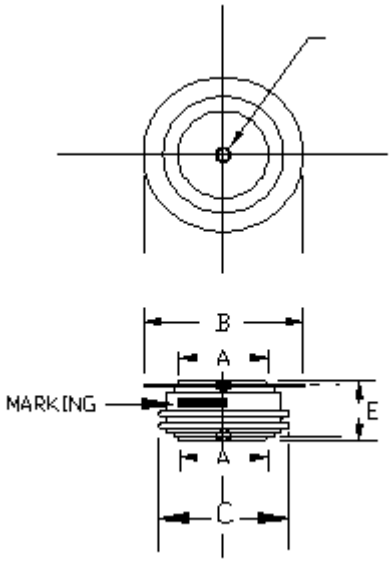
THERMAL AND MECHANICAL CHARACTERISTICS - Standard Rectifier

YW1074YC200

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Operating temperature	T_j	-40	+185		°C	
Storage temperature	T_{stg}	-40	+185		°C	
Thermal resistance - junction to case	$R_{\theta (j-c)}$	0.045 (1)	0.055 (2)		°C/W	Double sided cooled (1) @ 2000 lb.; (2) @ 800 lb.
Thermal resistamce - junction to case	$R_{\theta (j-c)}$	0.090 (1)	0.110 (2)		°C/W	Single sided cooled (1) @ 2000 lb.; (2) @ 800 lb.
Thermal resistance - case to sink	$R_{\theta (c-s)}$		.030 .060		°C/W	Double sided cooled * Single sided cooled *
Mounting force	P	3.6	11.2		lb. kN	
Weight	W				oz. g	

* Mounting surfaces smooth, flat and greased

CASE OUTLINE AND DIMENSIONS



A: 25 mm
B: 41 mm
C: 40 mm
E: 14.5 mm