

STANDARD RECOVERY DIODES

High Power Diodes Hockey Puk Version R3200 K...C Series

FEATURES

- ▣ Wide current range
- ▣ High surge current capabilities
- ▣ Case style DO-200AC (K-PUK)

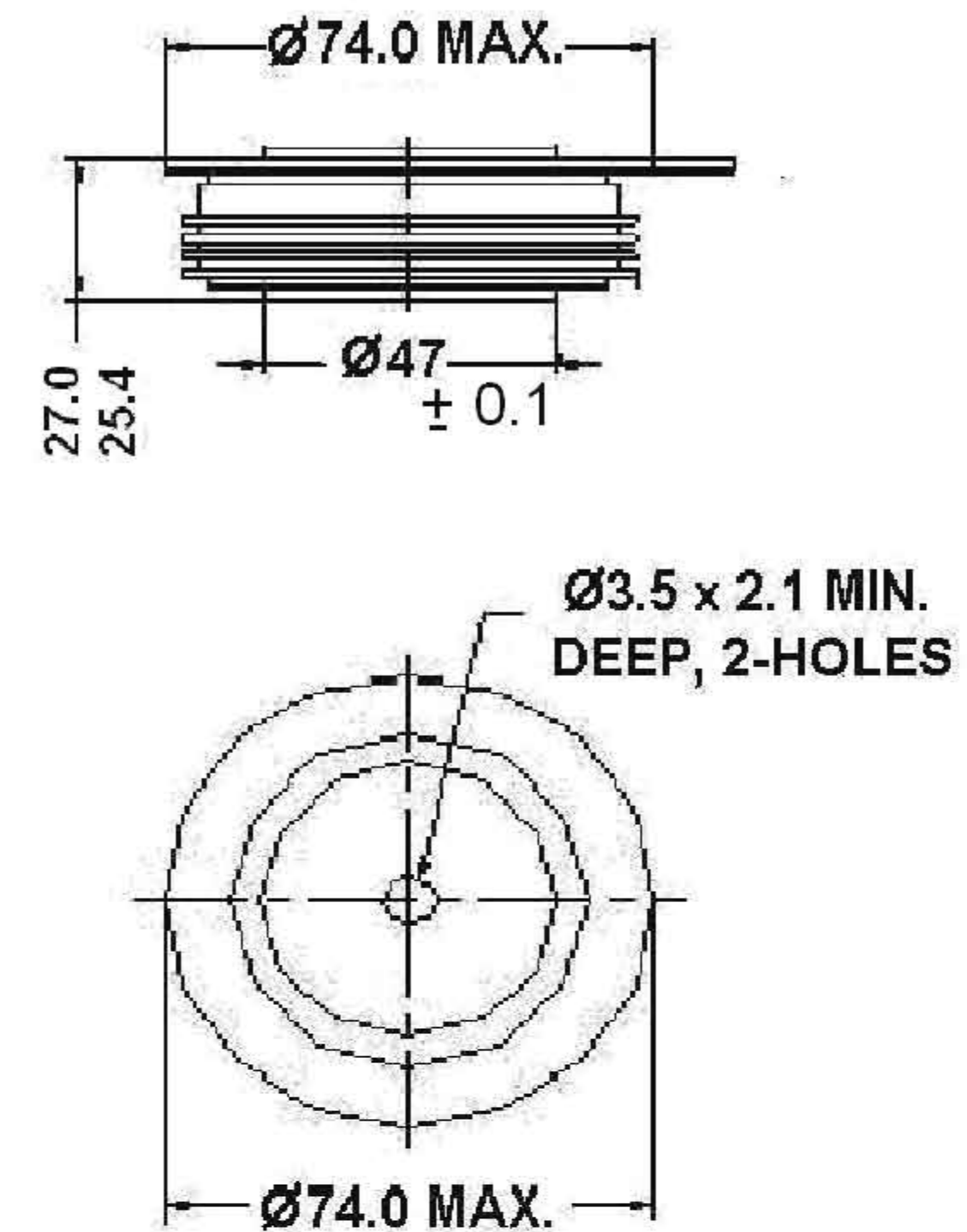
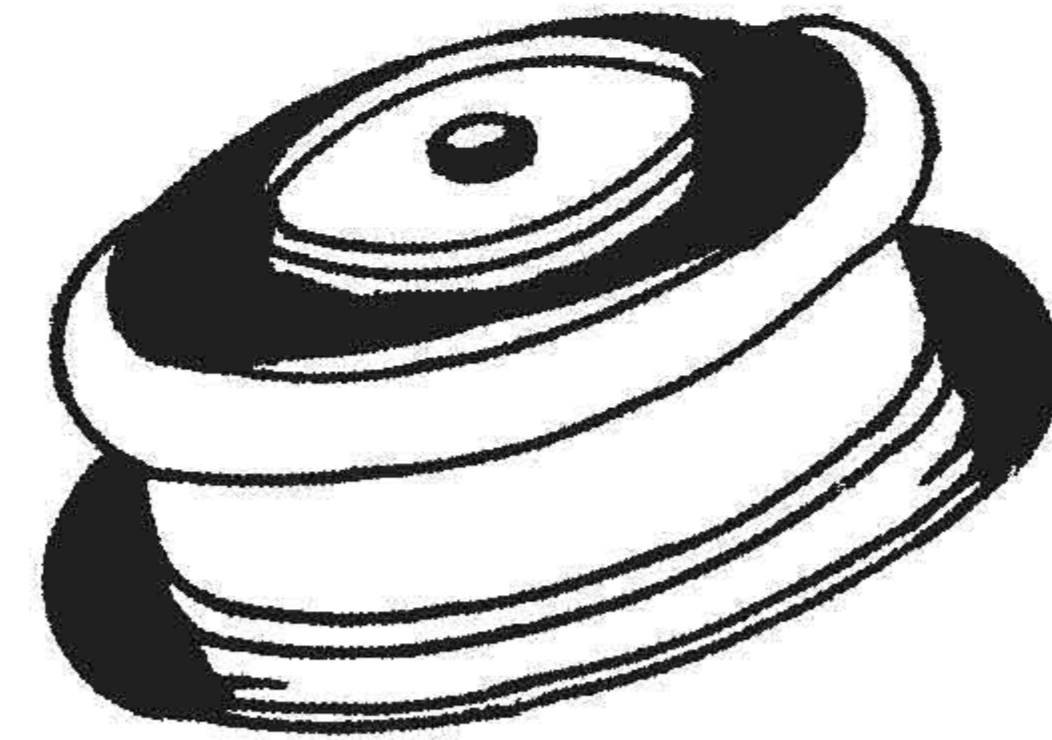
TYPICAL APPLICATIONS

- ▣ Converters
- ▣ High power drives
- ▣ Power supplies
- ▣ Traction Application

MAJOR RATINGS & CHARACTERISTICS

Parameters	R3200K	Units
$I_{F(AV)}$	3270	A
@ T_{hs}	55	°C
$I_{F(RMS)}$	5134	A
@ T_{hs}	55	°C
I_{FSM} @ 50 Hz	30400	A
I^2t @ 50 Hz	4620	KA ² s
V_{RRM} range	800 to 2200	V
T_J	-55 to 175	°C

R3200K (K - PUK)



All dimension in millimeters

STANDARD RECOVERY DIODES

R 3200K

ELECTRICAL SPECIFICATION VOLTAGE RATINGS

Type Number	Voltage Code	V_{RRM} , max. repetitive peak reverse voltage V	V_{RRM} , max. non-repetitive peak reverse voltage V	I_{DRM} max. @ $T_J = T_J$ max. mA
R3200K	08	800	900	50
	10	1000	1100	
	12	1200	1300	
	14	1400	1500	
	18	1800	1900	
	22	2200	2300	

FORWARD CONDUCTION

	Parameter	R3200K	Units	Conditions
$I_{F(AV)}$	Max. average Forward current @ heat sink temperature	3270	A	180° conduction, half sine wave double side cooled
		55	°C	
$I_{F(RMS)}$	Max. RMS Forward current	5134		@55°C heat sink temperature (double side cooled)
I_{FSM}	Max. peak one cycle Forward non-repetitive surge current	30400	A	t = 10ms Sinusoidal half wave, Initial $T_J = T_J$ max.
I^2t	Maximum I^2t for fusing	4620	kA ² s	t = 10ms
V_{TO}	Threshold voltage	0.73	V	$T_J = T_J$ max.
r_t	Forward slope resistance	0.12	mΩ	$T_J = T_J$ max.
I_{RM}	Reverse recovery current	50	A	di/dt = 1A/uS, I peak = 1000A, $T_J = T_J$ max.
V_{FM}	Max. Forward voltage drop	1.47	V	$I_{pk} = 6000A$, $T_J = T_J$ max., $t_p = 10ms$ sine pulse

THERMAL AND MECHANICAL SPECIFICATION

	Parameter	R 3200K	Units	Conditions
T_J	Max. operating temperature range	-55 to 175	°C	
T_{stg}	Max. storage temperature range	-55 to 200		
R_{thJ-hs}	Max. thermal resistance, junction to heat sink	0.022	K/W	DC operation double side cooled
F	Mounting force, ±10%	22250 (2250)	N (kg)	
w t	Approximate weight	425	g	
	Case style	DO-200AC(K-PUK)		See outline