

Rectifier Diode Modules

TYPE: YZPST-SKKD81/22H4

Features

- Heat transfer through aluminium nitride ceramic isolated metal baseplate
- Precious metal pressure contacts for high reliability
- Thyristor with amplifying gate

Typical Applications

- DC motor control
- Temperature control
- Professional light dimming

Maximum Ratings

Symbol	Condition	Ratings	Unit
$I_{T(AV)}$	Single phase, half wave, sin 180° conduction ; $T_C=85^{\circ}C$	82	A
I_{TRMS}	Single phase, half wave, sin 180° conduction	140	A
I_{TSM}	$T_j = T_{j\ MAX}$	1.75	kA
I^2t	$T_j = T_{j\ MAX}$	15	kA^2S
V_{DRM}/V_{RRM}	$T_j = T_{j\ MAX}$	2200	V
di/dt	non-repetitive	-	A/us
V_{iso}	A.C.1minute/1S	4000/4800	V
T_j		-40 ~ + 125	$^{\circ}C$
T_{stg}		-40 ~ + 125	$^{\circ}C$
W	About	95	g

Electrical Characteristics

Symbol	Condition	Ratings	Unit
I_{DRM}/I_{RRM}	At V_{DRM} , Single phase, half wave, $T_j = T_{j\ MAX}$	4.5	mA
V_{TM}	On-State Current 300A, $T_j=25^{\circ}C$	1.55	V
$V_{T(TO)}$	$T_j = T_{j\ MAX}$	0.85	V
r_T	$T_j = T_{j\ MAX}$	1.80	mΩ
R_{K1G1}		-	Ω
R_{K2G2}		-	Ω
t_{gd}	$T_j=25^{\circ}C$; $V_D=0.4V_{DRM}$; $I_{TM}=I_{TAV}$	-	us
t_q	$dv_D/dt=50V/us$; $T_j = T_{j\ MAX}$; $I_{TM}=I_{TAV}$	-	us
I_{GT}/V_{GT}	$T_j=25^{\circ}C$, $I_T=1A$, $V_D=6V$	-	mA/V
V_{GD}	$V_D=67\%V_{DRM}$	-	V
DV/DT	$V_D=67\%V_{DRM}$	-	V/us
I_H	$T_j=25^{\circ}C$	-	mA
I_L	$T_j=25^{\circ}C$	-	mA
$R_{th(j-c)}$	Thermal resistance Junction to case; per module	0.4	K /W
$R_{th(c-h)}$	Thermal resistance case to heatsink; per module	0.2	K /W

Outline Drawing

