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°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	°C
T_{stg}		-40 ~ + 125	°C
W	About	95	g

Electrical Characteristics

Symbol	Condition	Ratings	Unit
I_{DRM} /I_{RRM}	AtV_{DRM}, Single phase, half wave, T_j= $T_{j\ MAX}$	4.5	mA
V_{TM}	On-State Current 300A, T_j=25°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°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°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°C	-	mA
I_L	T_j=25°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