

## Rectifier Diode Modules

- TYPE:YZPST-MDC(3)-470-44-A2

$V_{INS}>6000VAC$

### Features

- Heat Transfer Through Aluminium Oxide Ceramic Isolated Metal Baseplate
- Hard Soldered Joints For High Reliability
- $V_{INS}>6000VAC$

### Typical Applications

- Rectifier for drives applications
- Rectifiers for UBS
- Battery chargers

### BLOCKING

Symbol	Condition	Ratings	Unit
$V_{RRM}$ $V_{RSM}$	$T_j = T_j \text{ Max.}$	4400 4500	V
$I_{RRM}$	$AtV_{RRM}$ , Single phase, half wave, $T_j = T_j \text{ Max.}$	50	mA
$V_{INS}$	50Hz, circuit to base, all terminal shorted	6000	V

### CONDUCTING

Symbol	Condition	Ratings	Unit
$I_{F(AV)}$	$T_C=100^\circ C$ ; 180° sine	510	A
$I_{F(RMS)}$	$T_C=95^\circ C$ ; 180° sine	790	A
$I_{FSM}$	$T_j = T_j \text{ Max.}$ ; t = 10 ms (50 Hz); sine	12.5	KA
$I^2t$	$T_j = T_j \text{ Max.}$ ; t = 10 ms (50 Hz); sine	780	kA <sup>2</sup> S
$V_{F(TO)}$	( $I > \pi \times I_{F(AV)}$ ), $T_j = T_j \text{ Max.}$	0.82	V
$r_F$	( $I > \pi \times I_{F(AV)}$ ), $T_j = T_j \text{ Max.}$	0.56	mΩ
$V_{FM}$	On-State Current 1256A, $T_j = 25^\circ C$	1.60	V

### Electrical Characteristics

Symbol	Condition	Ratings	Unit
$R_{th(j-c)}$	Per Module	0.032	K/W
$R_{th(c-h)}$	Per Module	0.0305	K/W
$T_j$		-40 ~ + 150	°C
$T_{stg}$		-40 ~ + 125	°C
M	mounting torque(M6)	6	Nm
	terminal torque(M10)	12	Nm
W		1500-	g

