

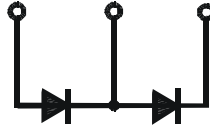
Fast Recovery Epitaxial Diode (FRED) Module

PSKD 30E

I_{FAV} = 25 A
 V_{RRM} = 200-600V

Preliminary Data Sheet

V_{RSM} V	V_{RRM} V	Type
200	200	PSKD 30E/02
400	400	PSKD 30E/04
600	600	PSKD 30E/06



Symbol	Test Conditions	Maximum Ratings
I_{FAV}	$T_C = 85^\circ\text{C}$	25 A
I_{FSM}	$T_{VJ} = 45^\circ\text{C}$	400 A
	$V_R = 0$	440 A
	$T_{VJ} = T_{VJM}$	360 A
	$V_R = 0$	400 A
$\int i^2 dt$	$T_{VJ} = 45^\circ\text{C}$	800 A ² s
	$V_R = 0$	800 A ² s
	$T_{VJ} = T_{VJM}$	650 A ² s
	$V_R = 0$	660 A ² s
T_{VJ}		-40 ... + 150 °C
T_{VJM}		150 °C
T_{stg}		-40 ... + 125 °C
V_{ISOL}	50/60 HZ, RMS $t = 1$ min	2500 V ~
	$I_{ISOL} \leq 1$ mA $t = 1$ s	3000 V ~
M_d	Mounting torque (M5)	5 Nm
	Terminal connection torque (M5)	5 Nm
Weight	typ.	160 g

Features

- Package with screw terminals
- Isolation voltage 3000 V~
- Planar glasspassivated chips
- Short recovery time
- Low forward voltage drop
- Short recovery behaviour
- UL registered, E 148688

Applications

- Inductive heating and melting
- Free wheeling diode in converters and motor control circuits
- Uninterruptible power supplies (UPS)
- Ultrasonic cleaners and welders

Advantages

- High reliability circuit operation
- Low voltage peaks for reduced protection circuits
- Low noise switching
- Low losses

Package, style and outline

Dimensions in mm (1mm = 0.0394")

