

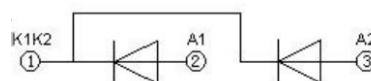
Standard Rectifier Diode

FEATURES

- Low leakage current
- Low forward voltage drop
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Powerex Dual Diode Modules are designed for use in applications requiring rectification and isolated packaging.



ABSOLUTE MAXIMUM RATINGS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{RRM}	Repetitive Peak Reverse Voltage	$t_p=10ms$	4000	V
$I_{F(AV)}$	Average Forward Current	$T_C=100^{\circ}C, 50Hz, 180^{\circ}$ Conduction	450	A
$I_{F(RMS)}$	RMS Forward Current		1256	A
I_{FSM}	Surge Forward Current	$t_p=10ms, V_R=0.6V_{RRM}$	18000	A
I^2t	I^2t for Fusing for One Cycle		1650000	A ² s
V_{iso}	Isolated Voltage	R.M.S, $f=50Hz, t=1min, I_{iso}=1mA$	2500	V
T_J	Junction Temperature		-40~150	$^{\circ}C$
T_{stg}	Storage Temperature Range		-40~150	$^{\circ}C$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th j-c}$	Thermal Resistance, Junction to Case	0.08	$^{\circ}C/W$

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Forward Voltage drop	$I_F=2400A, T_J=25^{\circ}C$	18	V
I_{RRM}	Instantaneous Reverse Current	$V_R=V_{RRM}, T_J=150^{\circ}C$	45	mA

