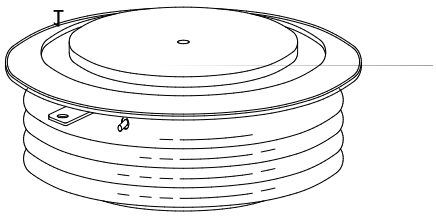
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T12C



Device Type	V_{RRM} (1)	V_{DRM} (1)	V_{RSM} (1)
KP2100/40	4000	4000	4100
KP2100/42	4200	4200	4300
KP2100/45	4500	4500	4600

V_{RRM} = Repetitive peak reverse voltage
V_{DRM} = Repetitive peak off state voltage
V_{RSM} = Non repetitive peak reverse voltage (2)

Notes:
(1) All voltage ratings are specified for an applied 50Hz sinusoidal waveform over the temperature range -40 °C to +125 °C.
(2) 10 msec. max. pulse width
(3) Maximum value for Tj = 125 °C.
(4) Minimum value for linear and exponential waveshape to 67% rated V_{DRM}. Gate open. Tj = 125 °C.
(5).The value of di/dt is established in accordance with EIA/NIMA Standard JB/T 8950.2-2013

Repetitive peak reverse leakage and off state leakage	I_{RRM}/I_{DRM}	5 mA 120 mA (3)
Critical rate of voltage rise	dv/dt (4)	1000 V/μs

Average value of on-state current	$I_{T(AV)}$	2100	A	Sinewave,180° conduction,T_c=70°C
RMS value of on-state current	I_{TRMS}	3297	A	Nominal value
Peak one cycle surge (non repetitive) current	I_{TSM}	35000	A	10.0 msec (50Hz), sinusoidal wave-shape, 180° conduction, T_j = 125 °C
I square t	I^2t	6.125x10^6	A^2s	10 msec
Latching current	I_L	1000	mA	V_D = 12 V; R_L= 12 ohms
Holding current	I_H	200	mA	V_D = 12 V; I = 2.5 A
Peak on-state voltage	V_{TM}	2.1	V	I_{TM}=3000A;Tj =25°C
Threshold voltage, low-level	V_{TO}	0.982	V	Tj=125°C
Slope resistance, low-level	r_T	0.274	mΩ	1000A to 5000A

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Peak gate power dissipation	P_{GM}		20	W	
Average gate power dissipation	$P_{G(AV)}$		4	W	
Gate-trigger current	I_{GT}		200	mA	V_D =12 V;R_L = 3 ohms;T_j = +25 °C
Gate- trigger voltage	V_{GT}	0.7	2.6	V	V_D = 12 V;R_L = 3 ohms;T_j = +25 °C
Peak					

