

KP4250-POWER THYRISTOR

Jiangsu Yangjie Runau Semiconductor Co.,Ltd

5800-6600 V_{DRM}

FREE FLOATING TYPE THYRISTOR FOR PHASE CONTROL APPLICATIONS

Features:

KT135dT

- . Free-floating silicon technology
- . Low on-state and switching losses
- . Optimum power handling capability
- . Blocking capability up to 6600 volts
- . Distributed amplifying gate

ELECTRICAL CHARACTERISTICS AND RATINGS

Blocking - Off State

Device Type	V _{RRM} (1)	V _{DRM} (1)	V _{RSM} (1)
KP4250/58	5800	5800	5800
KP4250/60	6000	6000	6000
KP4250/62	6200	6200	6200
KP4250/65	6600	6600	6600

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/60Hz sinusoidal waveform over the temperature range 0 to +110 °C.
- (2) 10 msec. max. pulse width
- (3) Maximum value for T_j = 110 °C.
- (4) Minimum value for linear and exponential waveshape to 67% rated V_{DRM}. Gate open. T_j = 110 °C.
- (5). The value of di/dt is established in accordance with JB/T 8950.2-2013

Repetitive peak reverse leakage and off state leakage	I _{RRM} /I _{DRM}	10mA 500 mA (3)
Critical rate of voltage rise	dv/dt (4)	2000 V/sec (min)

Conducting - On State

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Average value of on-state current	I _{T(AV)}		4250		A	Sinewave, 180° conduction, T _c =70°C
Peak value of on-state current	I _{TRMS}		6680		A	Nominal value

Peak one cycle surge

Gating

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Peak gate power dissipation	P _{GM}		20		W	

Average gate power dissipati

