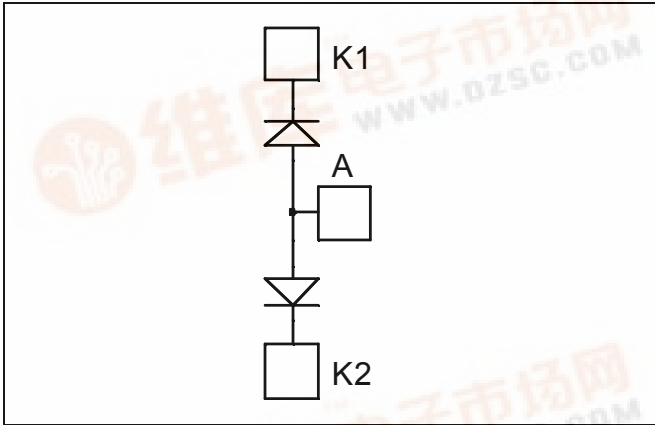


*Dual Common Anode diodes
Power Module*

**$V_{RRM} = 1700V$
 $I_C = 400A @ T_c = 55^\circ C$**



Application

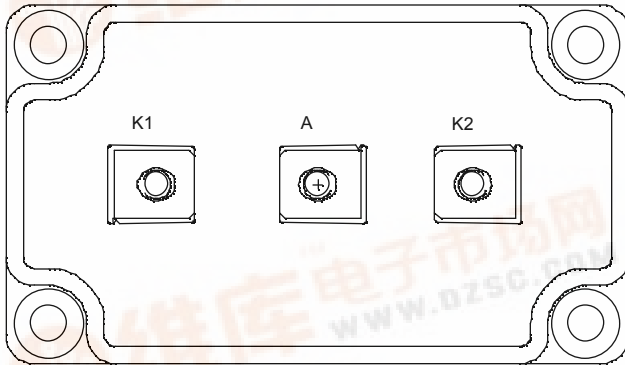
- Uninterruptible Power Supply (UPS)
- Induction heating
- Welding equipment
- High speed rectifiers

Features

- Ultra fast recovery times
- Soft recovery characteristics
- High blocking voltage
- High current
- Low leakage current
- Very low stray inductance
 - Symmetrical design
 - M5 power connectors
- High level of integration

Benefits

- Outstanding performance at high frequency operation
- Low losses
- Low noise switching
- Direct mounting to heatsink (isolated package)
- Low junction to case thermal resistance



Absolute maximum ratings

Symbol	Parameter	Max ratings	Unit		
V_R	Maximum DC reverse Voltage	1700	V		
V_{RRM}	Maximum Peak Repetitive Reverse Voltage				
$I_{F(AV)}$	Maximum Average Forward Current	Duty cycle = 50%	$T_c = 25^\circ C$	480	A
			$T_c = 55^\circ C$	400	
$I_{F(RMS)}$	RMS Forward Current			500	
I_{FSM}	Non-Repetitive Forward Surge Current	$T_j = 25^\circ C$		1500	

CAUTION: These Devices are sensitive to Electrostatic Discharge. Proper Handling Procedures Should Be Followed.

All ratings @ T_j = 25°C unless otherwise specified

Electrical Characteristics

Symbol	Characteristic	Test Conditions	Min	Typ	Max	Unit
V _F	Diode Forward Voltage	I _F = 400A	T _j = 25°C	2.2	2.5	V
			T _j = 125°C	2.1		
I _{RM}	Maximum Reverse Leakage Current	V _R = 1700V	T _j = 25°C		750	µA
			T _j = 125°C		1000	

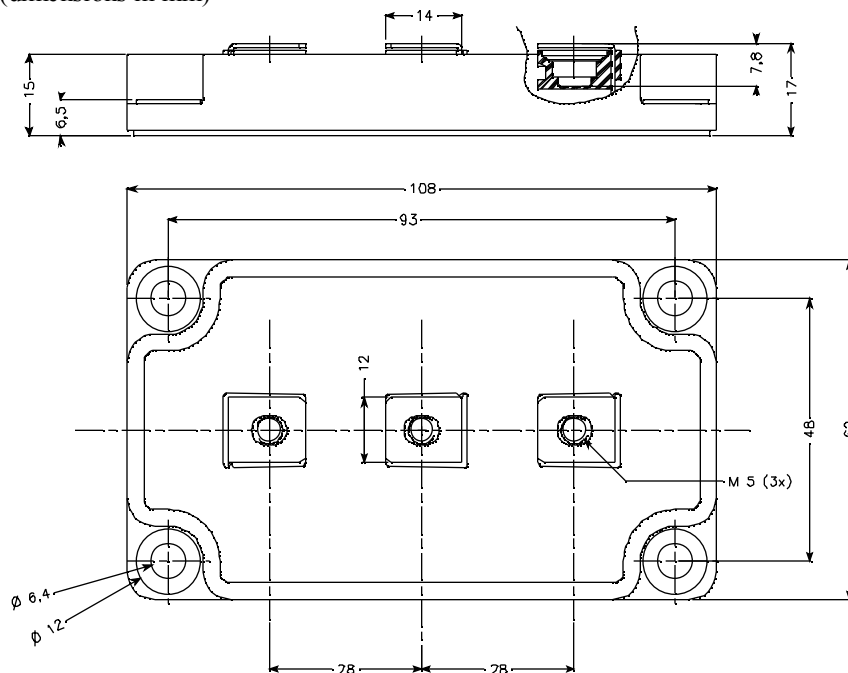
Dynamic Characteristics

Symbol	Characteristic	Test Conditions	Min	Typ	Max	Unit
t _{rr}	Reverse Recovery Time	I _F = 400A V _R = 900V di/dt = 4000A/µs	T _j = 25°C		572	ns
			T _j = 125°C		704	
Q _{rr}	Reverse Recovery Charge		T _j = 25°C		80	µC
			T _j = 125°C		140	
I _{RRM}	Reverse Recovery Current		T _j = 25°C	280		A
			T _j = 125°C	400		

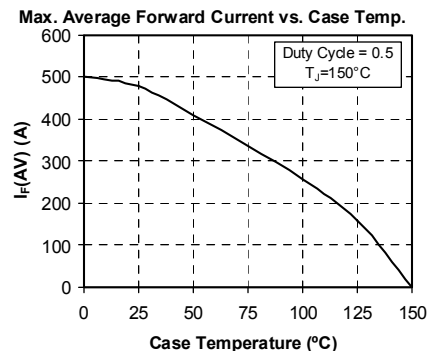
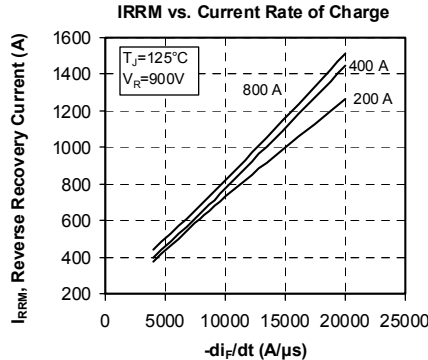
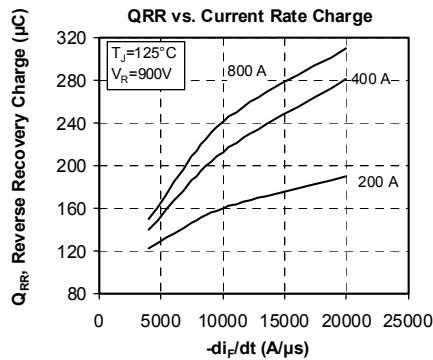
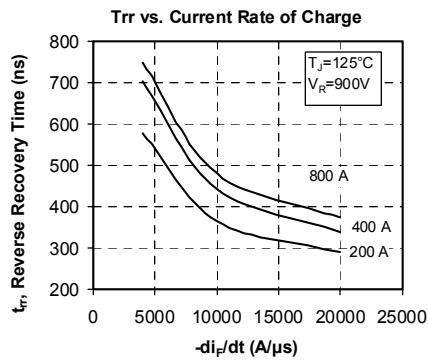
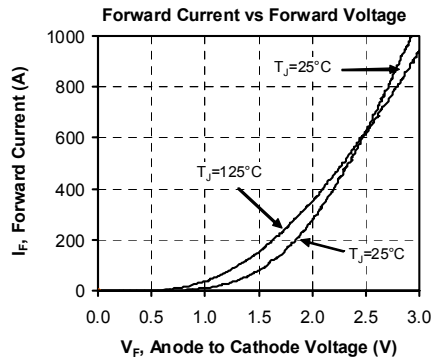
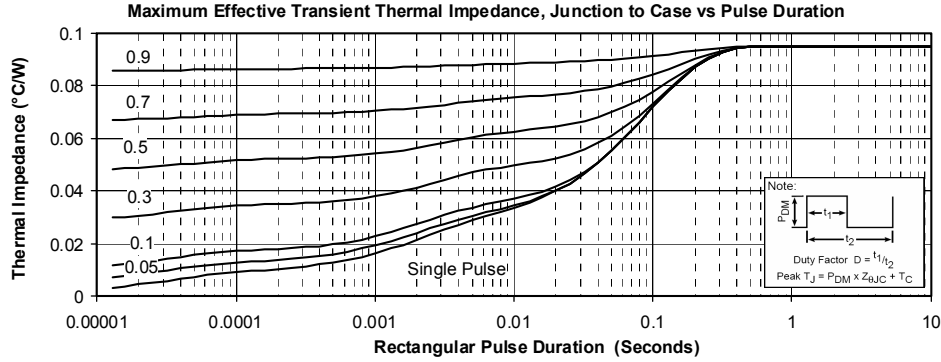
Thermal and package characteristics

Symbol	Characteristic	Min	Typ	Max	Unit	
R _{thJC}	Junction to Case			0.095	°C/W	
V _{ISOL}	RMS Isolation Voltage, any terminal to case t = 1 min, I isol < 1mA, 50/60Hz	3400			V	
T _J	Operating junction temperature range	-40		150	°C	
T _{STG}	Storage Temperature Range	-40		125		
T _C	Operating Case Temperature	-40		100		
Torque	Mounting torque	To heatsink For terminals	M6 M5	3 2	5 3.5	N.m
Wt	Package Weight				280	g

Package outline (dimensions in mm)



Typical Performance Curve



APT reserves the right to change, without notice, the specifications and information contained herein

APT's products are covered by one or more of U.S. patents 4,895,810 5,045,903 5,089,434 5,182,234 5,019,522 5,262,336 6,503,786 5,256,583 4,748,103 5,283,202 5,231,474 5,434,095 5,528,058 and foreign patents. U.S. and Foreign patents pending. All Rights Reserved.