

APTDF400KK170G

All ratings @ $T_j = 25$ °C unless otherwise specified

Electrical Characteristics

	Symbol	ol Characteristic Test Conditions		Min	Typ	Max	Unit	
I	$V_{\rm F}$	Diode Forward Voltage	$I_F = 400A$	$T_i = 25^{\circ}C$		2.2	2.5	V
				$T_{i} = 125^{\circ}C$		2.1		
	Ţ	Maximum Reverse Leakage Current	V = 1700V	$T_i = 25^{\circ}C$			750	^
	\mathbf{I}_{RM}	Waximum Reverse Leakage Current	$V_R = 1700V$	$T_{i} = 125^{\circ}C$			1000	μΑ

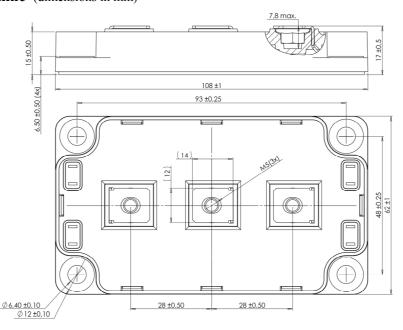
Dynamic Characteristics

Symbol	Characteristic	Test Conditions		Min	Тур	Max	Unit
t_{rr}	Reverse Recovery Time	$I_F = 400A$ $V_R = 900V$ $di/dt = 4000A/\mu s$	$T_j = 25^{\circ}C$		572		ns
·rr			$T_j = 125$ °C		704		
Q _{rr}	Reverse Recovery Charge		$T_j = 25$ °C		80		μС
Qrr			$T_{j} = 125^{\circ}C$		140		
Inne	Reverse Recovery Current		$T_j = 25^{\circ}C$		280		A
I_{RRM}			$T_j = 125$ °C		400		Α

Thermal and package characteristics

Symbol	Characteristic			Min	Тур	Max	Unit
R_{thJC}	Junction to Case Thermal Resistance					0.095	°C/W
V_{ISOL}	RMS Isolation Voltage, any terminal to case t =1 min, 50/60Hz			4000			V
T_{J}	Operating junction temperature range			-40		150	°C
T_{STG}	Storage Temperature Range Operating Case Temperature			-40		125	
T_{C}				-40		100	
Torque	Mounting torque	To heatsink	M6	3		5	N.m
Torque		For terminals	M5	2		3.5	11.111
Wt	Package Weight					300	g

SP6 Package outline (dimensions in mm)

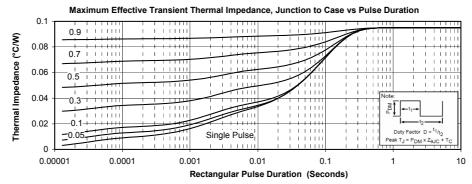


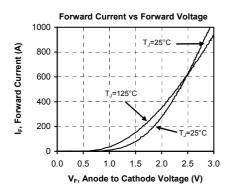
APTDF400KK170G - Rev 2 October, 2012

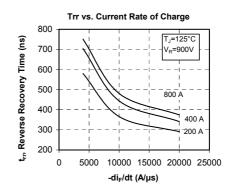


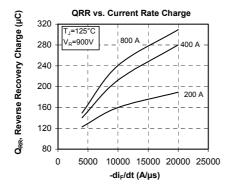
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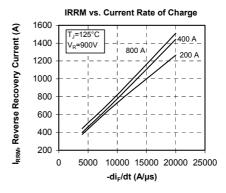
Typical Performance Curve

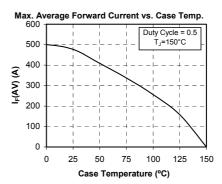














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APTDF400KK170G - Rev 2 October, 2012