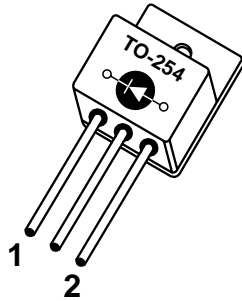


1 - Cathode
2 - Anode
Case Isolated



**ADVANCED
POWER
TECHNOLOGY®**
APT15D40C 400V 15A

ULTRAFAST SOFT RECOVERY RECTIFIER DIODE

PRODUCT APPLICATIONS	PRODUCT FEATURES	PRODUCT BENEFITS
<ul style="list-style-type: none"> • Anti-Parallel Diode <ul style="list-style-type: none"> -Switchmode Power Supply -Inverters • Free Wheeling Diode <ul style="list-style-type: none"> -Motor Controllers -Converters • Snubber Diode • Uninterruptible Power Supply (UPS) • Induction Heating • High Speed Rectifiers 	<ul style="list-style-type: none"> • Ultrafast Recovery Times • Soft Recovery Characteristics • Hermetic TO-254 Package • Low Forward Voltage • High Blocking Voltage • Low Leakage Current 	<ul style="list-style-type: none"> • Low Losses • Low Noise Switching • Cooler Operation • Higher Reliability Systems • Increased System Power Density

MAXIMUM RATINGS

All Ratings: $T_C = 25^\circ\text{C}$ unless otherwise specified.

Symbol	Characteristic / Test Conditions	APT15D40C	UNIT
V_R	Maximum D.C. Reverse Voltage	400	Volts
V_{RRM}	Maximum Peak Repetitive Reverse Voltage		
V_{RWM}	Maximum Working Peak Reverse Voltage		
$I_F(AV)$	Maximum Average Forward Current ($T_C = 90^\circ\text{C}$, Duty Cycle = 0.5)	15	Amps
$I_F(RMS)$	RMS Forward Current	25	
I_{FSM}	Non-Repetitive Forward Surge Current ($T_J = 45^\circ\text{C}$, 8.3ms)	110	
T_J, T_{STG}	Operating and Storage Temperature Range	-55 to 150	$^\circ\text{C}$
T_L	Lead Temperature: 0.063" from Case for 10 Sec.	300	

STATIC ELECTRICAL CHARACTERISTICS

Symbol	Characteristic / Test Conditions	MIN	TYP	MAX	UNIT
V_F	Maximum Forward Voltage			1.7	Volts
				$I_F = 15\text{A}$	
				$I_F = 30\text{A}$	
I_{RM}	Maximum Reverse Leakage Current			150	μA
				$V_R = V_R \text{ Rated}$	
				$V_R = V_R \text{ Rated}, T_J = 125^\circ\text{C}$	
C_T	Junction Capacitance, $V_R = 200\text{V}$		TBD		pF
L_S	Series Inductance (Lead to Lead 5mm from Base)		10		nH

APT Website - <http://www.advancedpower.com>

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