

FAST RECOVERY EPITAXIAL DIODE	200V / 60A $V_F=1.1V @ I_F=30A, t_{rr}=30ns$
<p>PRODUCT FEATURES</p> <ul style="list-style-type: none"> ● Ultrafast Recovery Time ● Soft Recovery Characteristics ● Low Recovery Loss ● Low Forward Voltage ● High Surge Current Capability ● Low Leakage Current <p>APPLICATIONS</p> <ul style="list-style-type: none"> ● Converter, PFC ● Freewheeling, Snubber ● UPS, Plating Power Supply ● Inversion Welder <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> ● Case : TO-3PN Molded Plastic ● Epoxy : UL94V-0 rate flame retardant ● Polarity : As Marked 	<p>TO-3PN</p> <p style="text-align: center;">Dimensions in inches (millimeter)</p>

ABSOLUTE MAXIMUM RATINGS (TC=25°C unless otherwise specified)				
PARAMETER		SYMBOL	VALUES	UNIT
		Marking	D60A02PT	
Maximum Repetitive Reverse Voltage		V _{RM}	200	V
Average Forward Current	T _C =95°C, Per Diode	I _{F(AV)}	30	A
	T _C =95°C, Per Package		60	
Non-Repetitive Surge Forward Current	t _p =10ms, 50Hz, Half Sine Wave	I _{FSM}	300	A
Power Dissipation		P _D	142	W
Operating Junction and Storage Temperatures		T _J , T _{STG}	-55 to + 150	°C
Thermal Resistance	Junction-to-Case	R _{θJC}	0.88	°C/W
Module-to-Sink			1.1	Nt.m
Weight			6.0	g

ELECTRICAL AND DYNAMIC RECOVERY CHARACTERISTICS (T _J =25°C, unless otherwise specified)						
PARAMETER	TEST CONDITIONS	SYMBOL	Min.	Typ.	Max.	UNIT
Reverse Leakage Current	V _R =200V	I _{RM}	-	-	25	μA
	V _R =200V, T _J =125°C		-	-	250	μA
Forward Voltage	I _F =30A	V _F	-	0.85	1.0	V
	I _F =30A, T _J =125°C		-	-	0.94	V
Reverse Recovery Time	I _F =1A, V _R =30V, di _F /dt=-200A/μs	t _{rr}	-	26	32	ns
Reverse Recovery Time	V _R =100V, I _F =30A	t _{rr}	-	30	-	ns
Max. Reverse Recovery Current	di _F /dt=-200A/μs, T _J =25°C	I _{RRM}	-	2.5	-	A
Reverse Recovery Time	V _R =100V, I _F =30A	t _{rr}	-	45	-	ns
Max. Reverse Recovery Current	di _F /dt=-200A/μs, T _J =125°C	I _{RRM}	-	4.2	-	A

FIG. 1 - Typical Forward Voltage Drop Characteristics

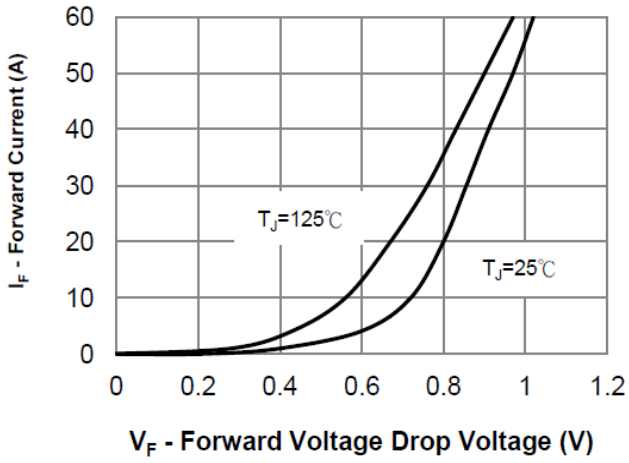


FIG. 2 - Typical Value of Reverse Current vs. Reverse Voltage

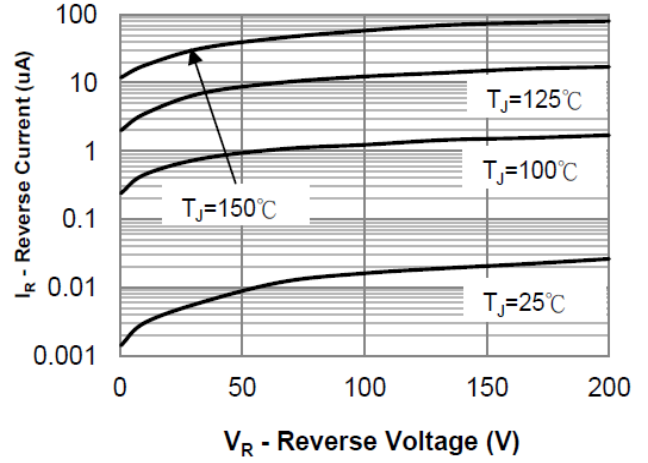


FIG. 3 - Typical Junction Capacitance vs. Reverse Voltage

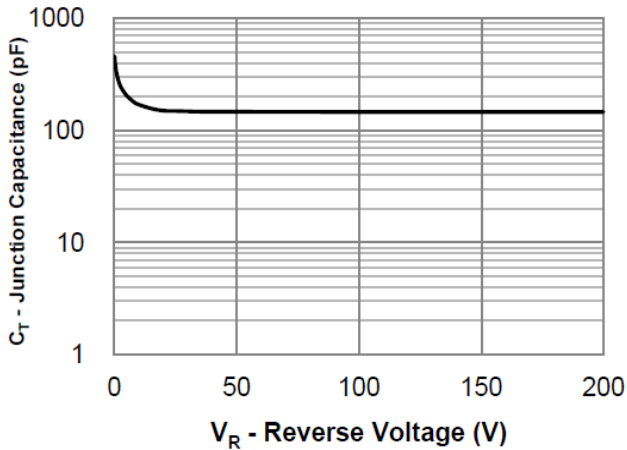
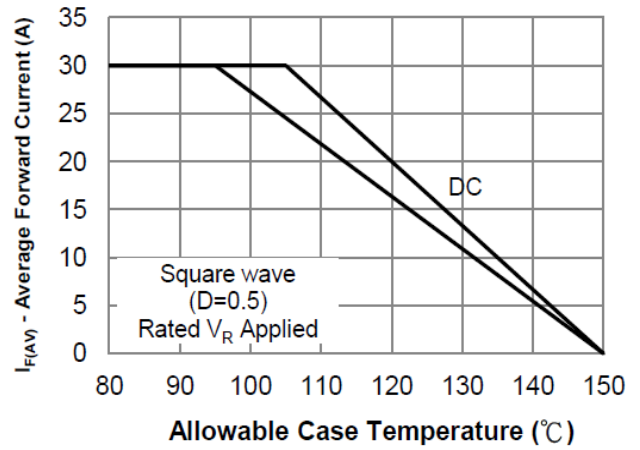


FIG. 4 - Average Forward Current vs. Maximum Allowable Case Temperature



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考!)