

ETF16005CT THRU ETF1610CT

16 Amperes High Power Super Fast Rectifiers
VOLTAGE : 50 TO 1000Volts

Features	Outline
• Dual rectifier construction, positive centetap, offer 8.0A half wave and 16.0A full wave rectification. • Low power loss, high efficiency. • High surge current capability. • Super fast recovery time for switching mode application. • Low power loss. • Glass passivated chip junctions. • Suffix "G" indicates Halogen-free part, ex.ETF16005CTG. • Lead-free parts meet environmental standards of MIL-STD-19500 /228	ITO-220AB Dimensions in inches and (millimeters)
Mechanical data	
• Epoxy : UL94-V0 rated flame retardant. • Case : JEDEC ITO-220AB molded plastic body over passivated chip. • Lead : Axial leads, solderable per MIL-STD-202, Method 208 guranteed. • Polarity: Color band denotes cathode end. • Mounting Position : Any. • Weight : Approximated 2.25 gram.	

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS									
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.									
Parameter	Symbol	ETF16005CT	ETF1601CT	ETF1602CT	ETF1604CT	ETF1606CT	ETF1608CT	ETF1610CT	UNIT
Making code		ETF16005CT	ETF1601CT	ETF1602CT	ETF1604CT	ETF1606CT	ETF1608CT	ETF1610CT	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	
Maximum Forward Voltage@8.0A, T _A = 25°C	V _F	0.95			1.30	1.70			V
Maximum reverse recovery time(1) @ T _J = 25°C	T _{rr}	35			50				ns
Operating Temperature	T _J	-50 ~ +150							°C
Note : 1. I _F = 0.5A, I _R = 1.0A , I _{RR} = 0.25A									
Parameter	Conditions				Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current					I _O			16	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)				I _{FSM}			125	A
Reverse current	V _R = V _{RRM} T _A = 25°C				I _R			1.0	uA
	V _R = V _{RRM} T _A = 125°C							300	
Typical junction capacitance	f=1MHz and applied 4V DC reverse voltage				C _J		62		pF

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Rating and characteristic curves

FIG.1- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

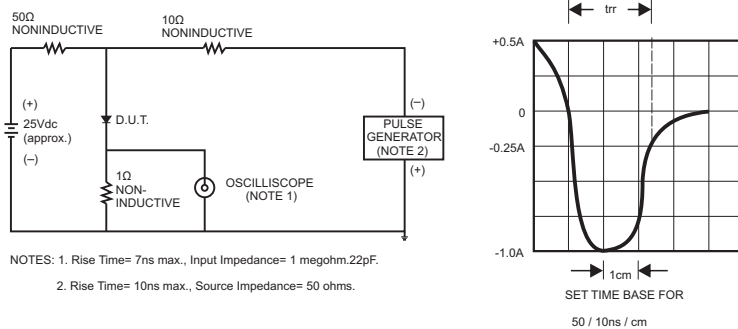


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

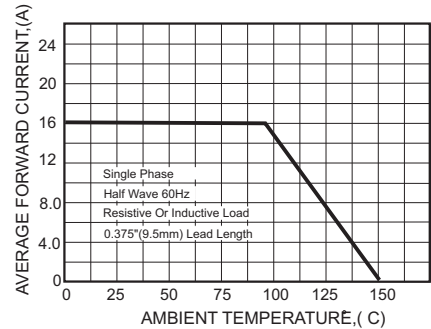


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

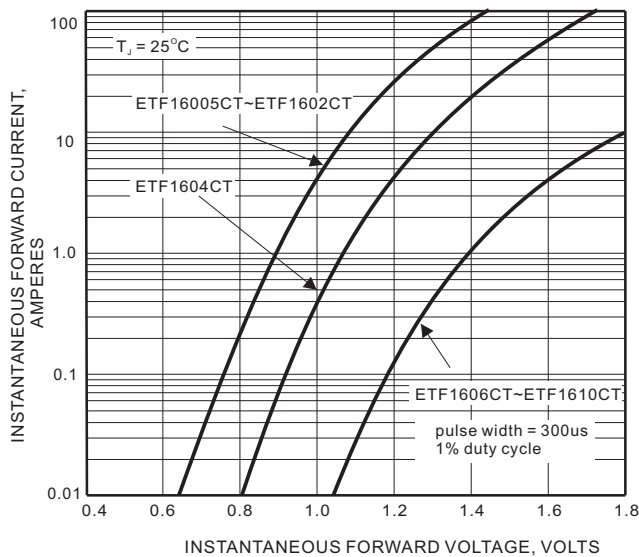


FIG.4-TYPICAL REVERSE CHARACTERISTICS

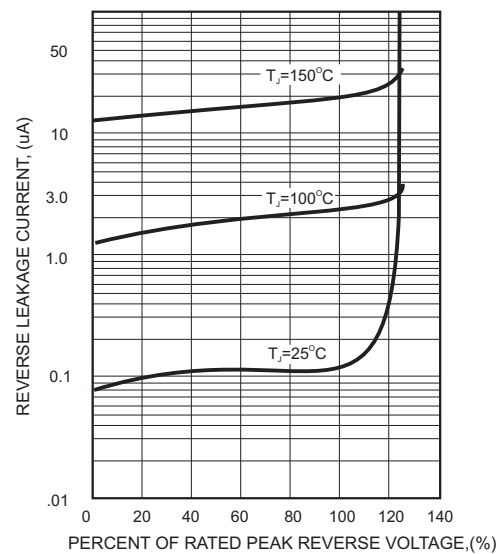


FIG.5-MAXIMUM NON-REPETITIVE

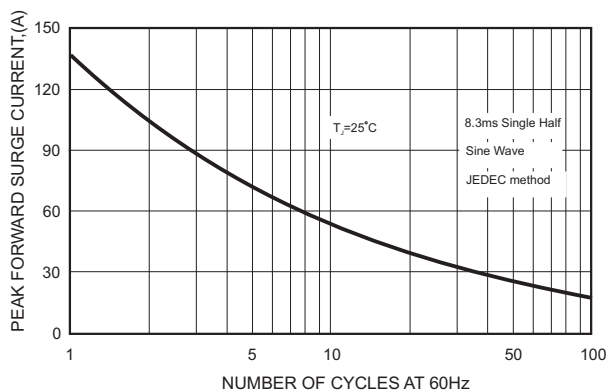


FIG.6-TYPICAL JUNCTION CAPACITANCE

