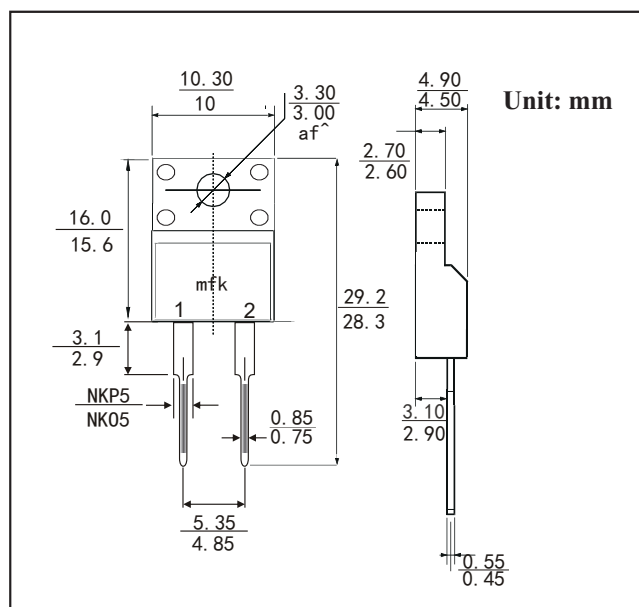


TO-220F-2 Ultra-Fast Recovery Rectifier Diodes

FEATURES

Plastic package has Underwriters Laboratory Flammability Classification 94V-0 Fast switching for high efficiency
Low forward voltage drop
Single rectifier construction
High surge capability
For use in low voltage ,high frequency inverters,

free wheeling ,and polarity protection applications
High temperature soldering guaranteed:260°C/10 seconds,
0.25"(6.35mm)from case
Component in accordance to RoHS 2011/65/EU



MAXIMUM RATINGS AND CHARACTERISTICS

(Ratings at 25 C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

		Symbols	MURF820	MURF840	MURF860	Units
Maximum repetitive peak reverse voltage		V _{RRM}	200	400	600	Volts
Maximum RMS voltage		V _{RMS}	140	280	420	Volts
Maximum DC blocking voltage		V _{DC}	200	400	600	Volts
Maximum average forward rectified current(see Fig.1)		I(AV)	8.0			Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	150.0			Amps
Maximum instantaneous forward voltage at 8.0 A(Note 1)		V _F	0.975	1.3	1.7	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _A =25°C	I _R	5	10		μA
	T _A =125°C		500			
Maximum Reverse Recovery Time (Note 2)		T _{rr}	35			ns
Typical thermal resistance (Note 3)		R _{θJC}	1.5			°C/W
Operating junction temperature range		T _J	-55 to+150			°C
Storage temperature range		T _{STG}	-55 to+150			°C

Notes: 1. Pulse test: 300 μs pulse width,1% duty cycle

2. Reverse recovery test conditions $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.5A$

3. Thermal resistance from junction to case

FIG.1-FORWARD CURRENT DERATING CURVE

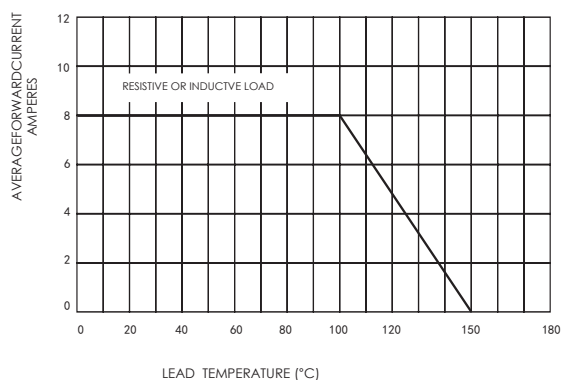


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

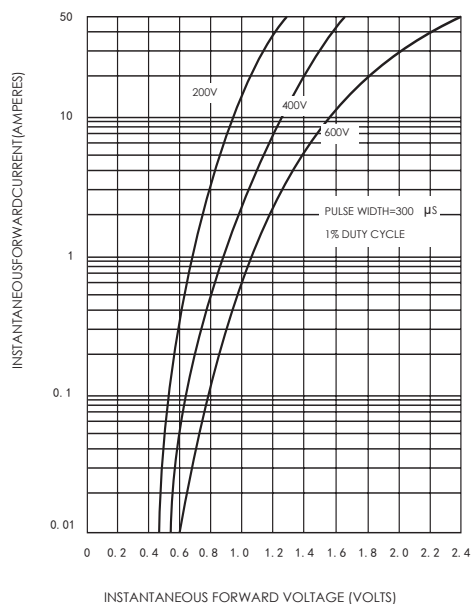


FIG.5-TYPICAL JUNCTION CAPACITANCE

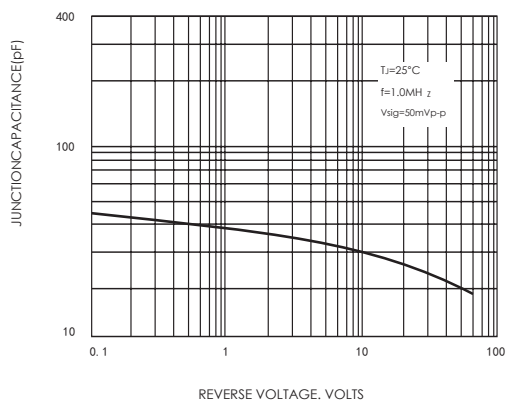


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

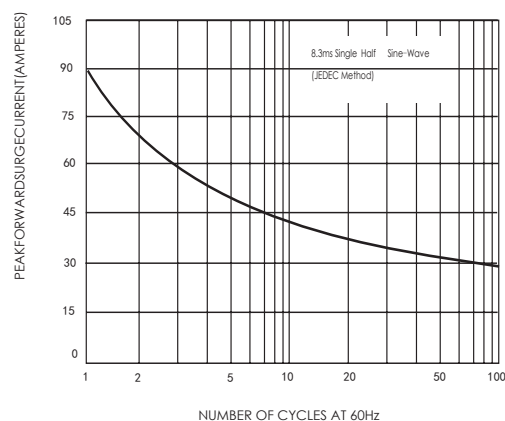


FIG.4-TYPICAL REVERSE CHARACTERISTICS

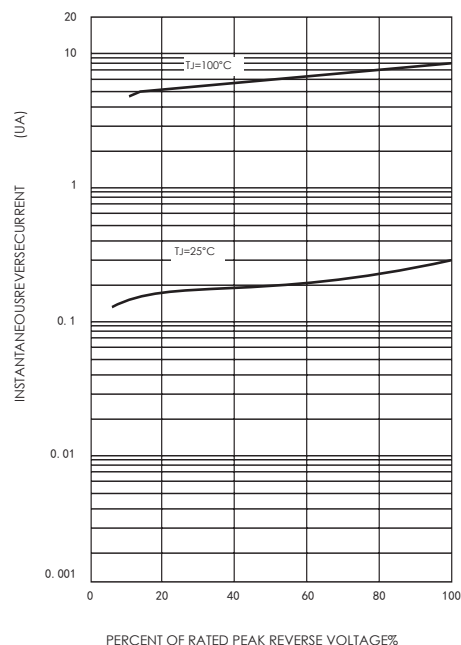


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

