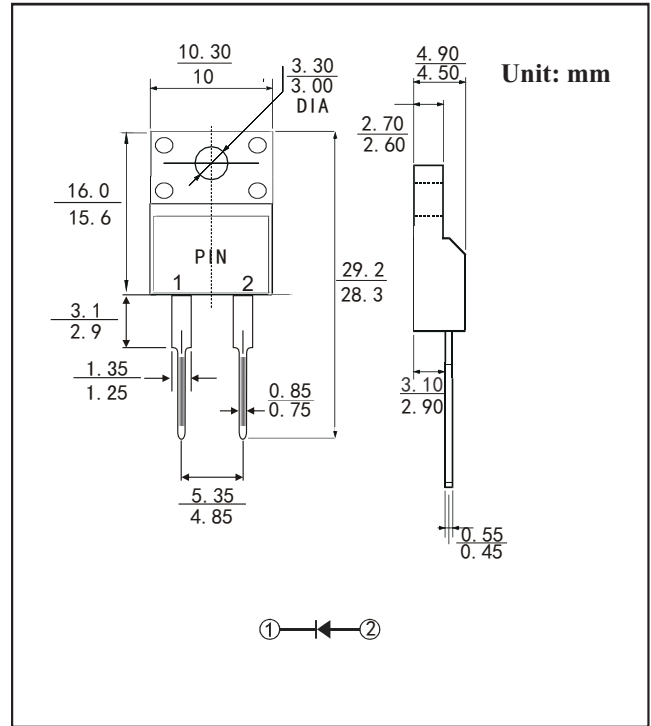


FRED 8.0Amp Super Fast Recovery Rectifiers
Features

The plastic package carries Underwriters
Laboratory Flammability Classification 94V-0
Construction utilizes void-free molded plastic
 technique
Low reverse leakage
High forward surge current capability
High temperature soldering guaranteed
 260°C/10 seconds at terminals

Mechanical Data

Case : Molded plastic body
Terminals : Solder plated, solderable per MIL-
 STD-750, Method 2026 **Polarity** : Polarity symbol
 marking on body
Mounting Position : Any


Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load,
 for capacitive load current derate by 20%.

Parameter	SYMBOLS	MURF 805	MURF 810	MURF 820	MUR 840	MURF 850	MURF 860	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	500	600	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	350	420	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	500	600	V
Maximum average forward rectified current at T _c =110°C	I _(AV)	8.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	100.0						A
Maximum instantaneous forward voltage at 8.0A	V _F	0.95			1.25	1.7		V
Maximum DC reverse current at rated DC blocking voltage T _A =25°C T _A =125°C	I _R	2 200						μ A
Maximum reverse recovery time	T _{rr}	35			50			ns
Typical thermal resistance	R _{qjc}	3.5						°C/W
Operating junction temperature range	T _J	-55 to +150						°C
Storage temperature range	T _{STG}	-55 to +150						°C

Note: 1. Reverse recovery time test condition: $I_F=0.5\text{A}$ $I_R=1.0\text{A}$ $I_{rr}=0.25\text{A}$

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

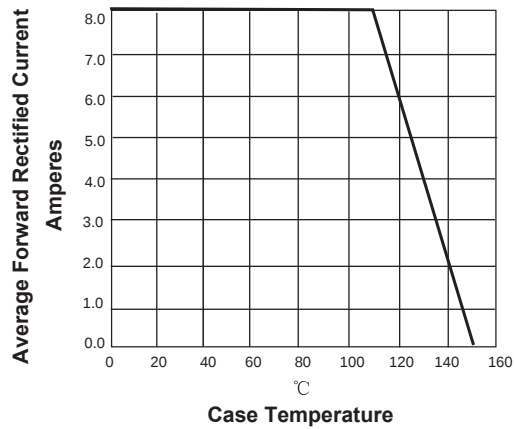


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

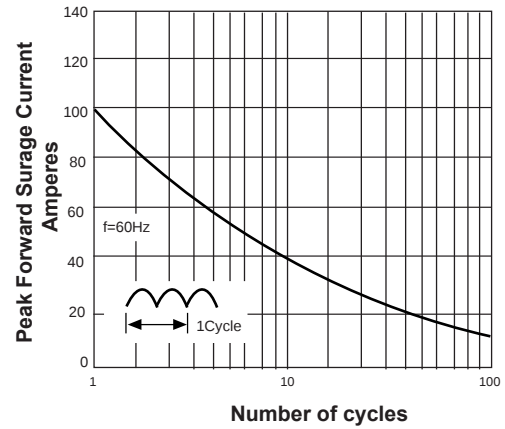


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

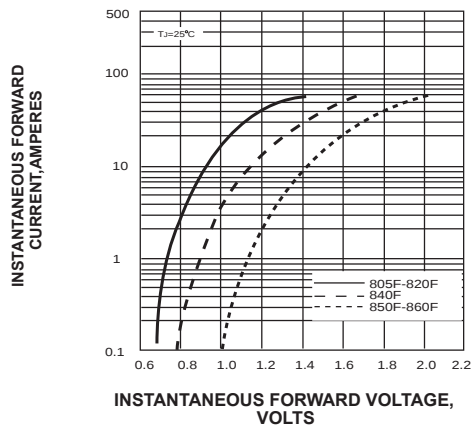


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

