

15.0Amp Super Fast Recovery Rectifiers
Features

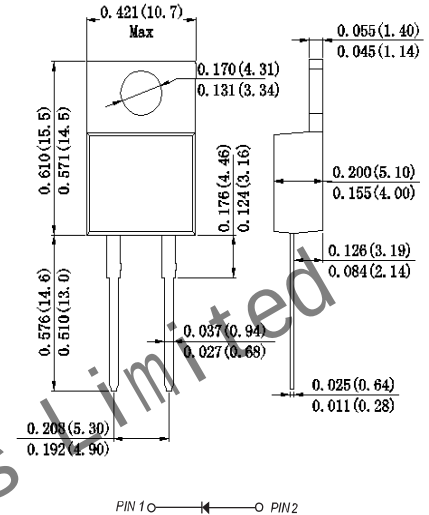
- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed
260°C/10 seconds at terminals

TO-220AC

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


Dimensions in inches and (millimeters)

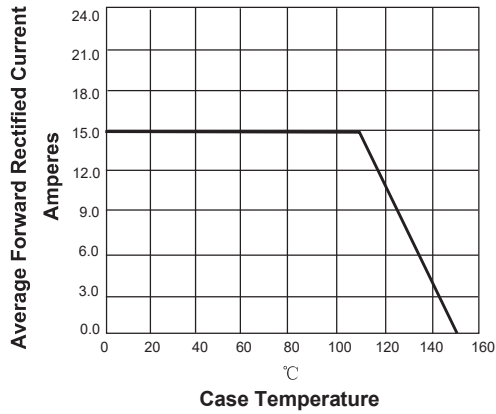
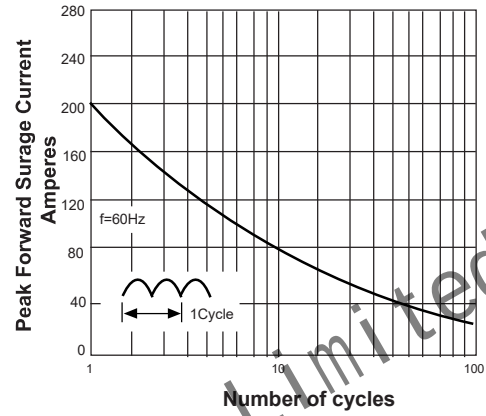
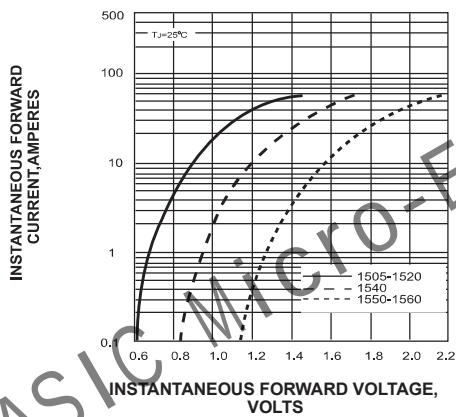
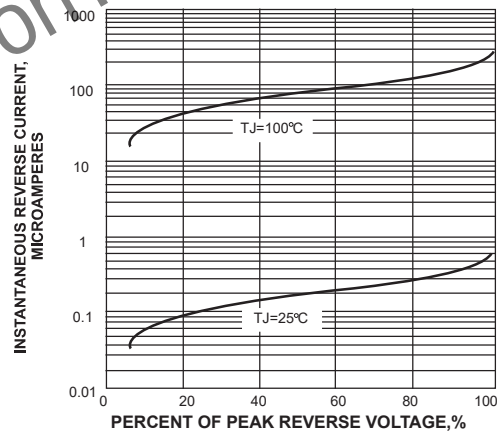
Maximum Ratings And Electrical Characteristics

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%.

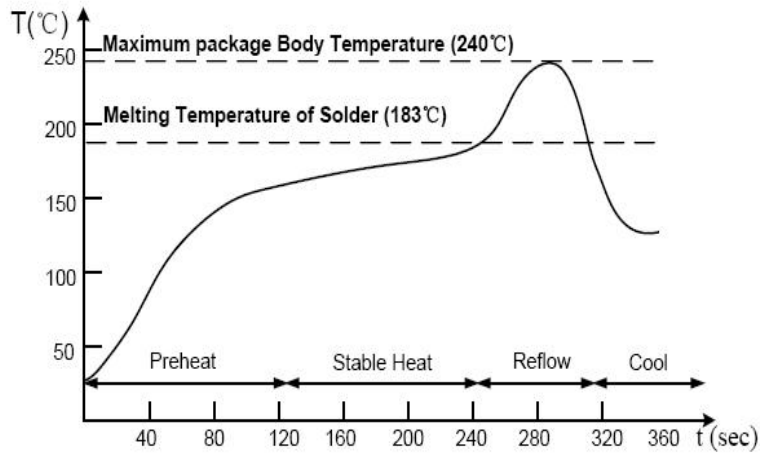
Parameter	SYMBOLS	ASFMUR 1505QX0	ASFMUR 1510QX0	ASFMUR 1520QX0	ASFMUR 1540QX0	ASFMUR 1550QX0	ASFMUR 1560QX0	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	500	600	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	350	420	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	500	600	V
Maximum average forward rectified current at T _c =110°C	I _(AV)	15.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	200						A
Maximum instantaneous forward voltage per diode at 15.0A	V _F	1.0			1.3	1.8		V
Maximum DC reverse current at rated DC blocking voltage	I _R	10 500						u A
Maximum reverse recovery time	T _{rr}	35			60			ns
Typical thermal resistance	R _{qjc}	35.0						°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


Suggested Soldering Temperature Profile



Note

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 265°C for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

Package Information

Tube Package

Package	Tube (mm)	Q'TY/Tube (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
TO	525*31.9*6.4	0.05	545*150*45	1.0	575*245*170	5.0