

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

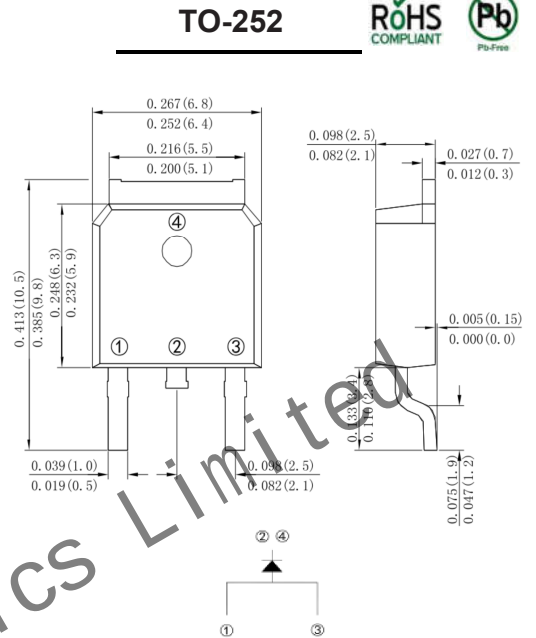
Mechanical Data

Case : Molded plastic body

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Polarity symbol marking on body

Mounting Position : Any



Dimensions in inches and (millimeters)

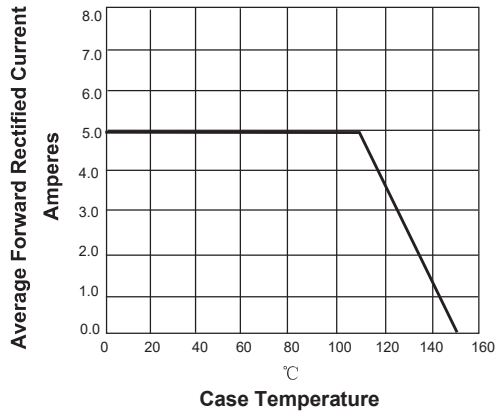
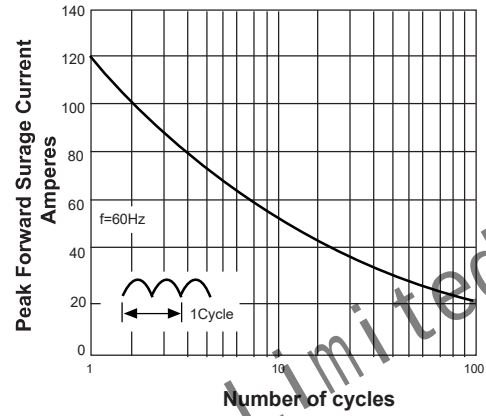
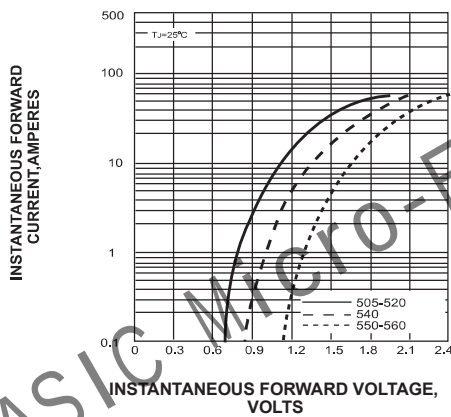
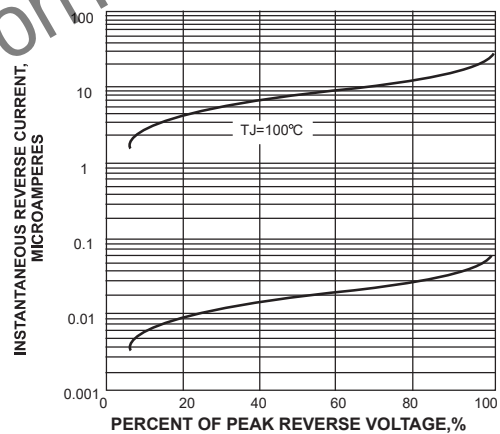
Maximum Ratings And Electrical Characteristics

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%.

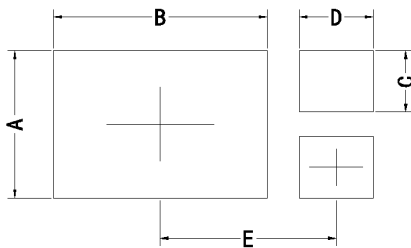
Parameter	SYMBOLS	ASFMUR 505YSGX0	ASFMUR 510YSGX0	ASFMUR 520YSGX0	ASFMUR 540YSGX0	ASFMUR 550YSGX0	ASFMUR 560YSGX0	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	500	600	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	350	420	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	500	600	V
Maximum average forward rectified current at T _c =110°C	I _(AV)	5.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	120.0						A
Maximum instantaneous forward voltage at 5.0A	V _F	1.0			1.3	1.7		V
Maximum DC reverse current at rated DC blocking voltage	T _A =25°C T _A =125°C I _R	5 200						u A
Maximum reverse recovery time	T _{rr}	35			50			ns
Typical thermal resistance	R _{qJC}	15.0						°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: $I_F=0.5A$ $I_R=1.0A$ $I_{rr}=0.25A$

Ratings And Characteristic Curves

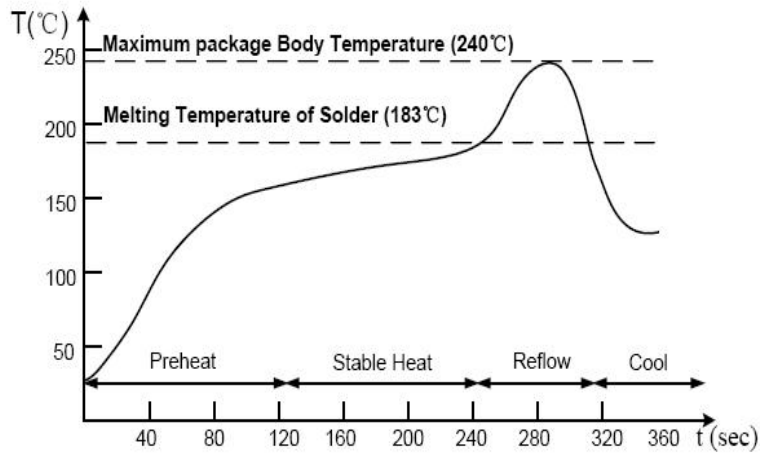
FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

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

FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS


Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	6.10	0.240
B	7.57	0.298
C	1.42	0.056
D	2.76	0.109
E	6.64	0.261

Suggested Soldering Temperature Profile

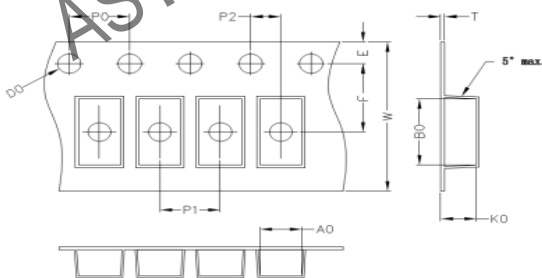


Note

- 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

Carrier Dimension(mm)



A0	B0	K0	D0	E	F
6.90	10.5	2.70	1.55	1.75	7.50
P0	P1	P2	T	W	Tolerance
4.0	8.0	2.0	0.30	16	0.1

Package Specifications

Package	Reel Size	Reel DIA. (mm)	Q'TY/Reel (Kpcs)	Box Size (mm)	QTY/Box (Kpcs)	Carton Size (mm)	Q'TY/Carton (Kpcs)
TO-252	13'	330	3.0	340	6.0	360*360*360	48