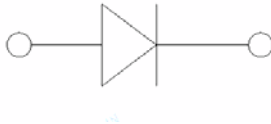
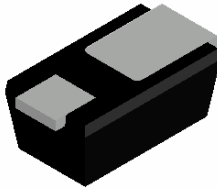
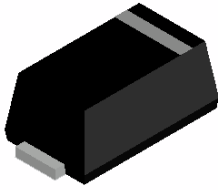




Surface Mount General Purpose Rectifier



Features

- of 260 °C
- Part no. with suffix "Q" means AEC-Q101 qualified

Typical Applications

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, automotive and telecommunication.

Mechanical Data

- **Package:** SOD-323HE
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end

■Maximum Ratings (T_a=25 °C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	FMG1AEQ	FMG1BEQ	FMG1DEQ	FMG1GEQ	FMG1JEQ
Device marking code			1A	1B	1D	1G	1J
Repetitive peak reverse voltage	V _{RRM}	V	50	100	200	400	600
Maximum RMS voltage	V _{RMS}	V	35	70	140	280	420
Maximum average forward rectified current at T _L (Fig.1)	I _{F(AV)}	A	1.0				
Surge(non-repetitive) @ 60Hz half cycle, T _j =25 °C	I _{FSM}	A	18				
Current Squared Time @1ms≤t<8.3ms T _j =25 °C	I ² t	A ² s	1.34				

		UNIT	TEST CONDITIONS	FMG1AEQ	FMG1BEQ	FMG1DEQ	FMG1GEQ	FMG1JEQ
Maximum instantaneous forward voltage drop per diode	V _F	V	I _F =1.0A	1.1				
Typical junction capacitance	C _J	pF	V _R =4V, 1 MHz	5				
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	T _j =25 °C	5				
			T _j =125 °C	50				



FMG1AEQ THRU FMG1JEQ

■ Characteristics(Typical)

Fig.1:Forward Current Derating Curve

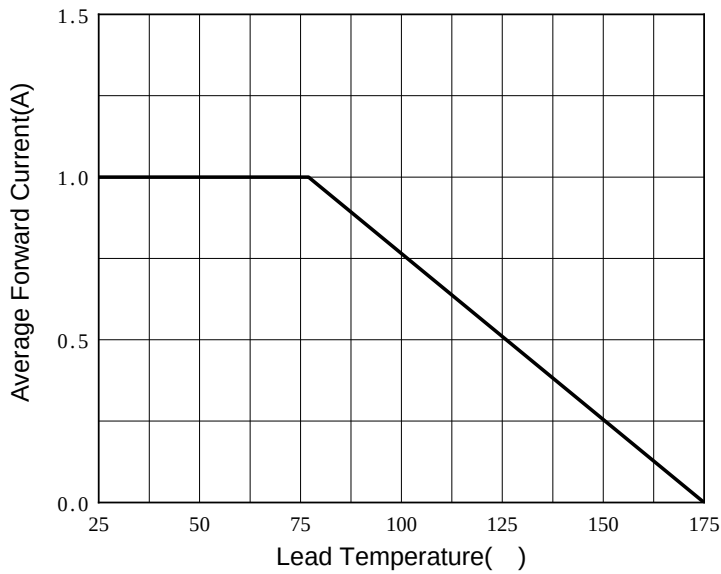


Fig.2:Forward Surge Current Capability

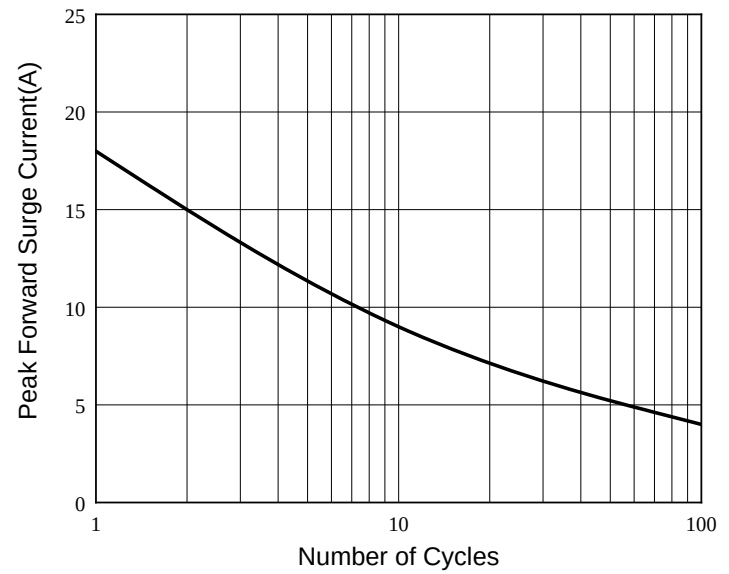


Fig.3:Typical Instantaneous Forward Characteristics

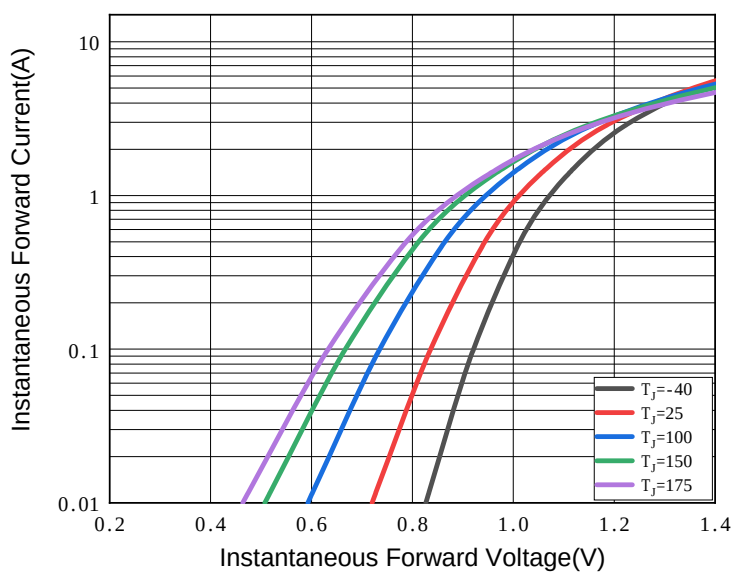
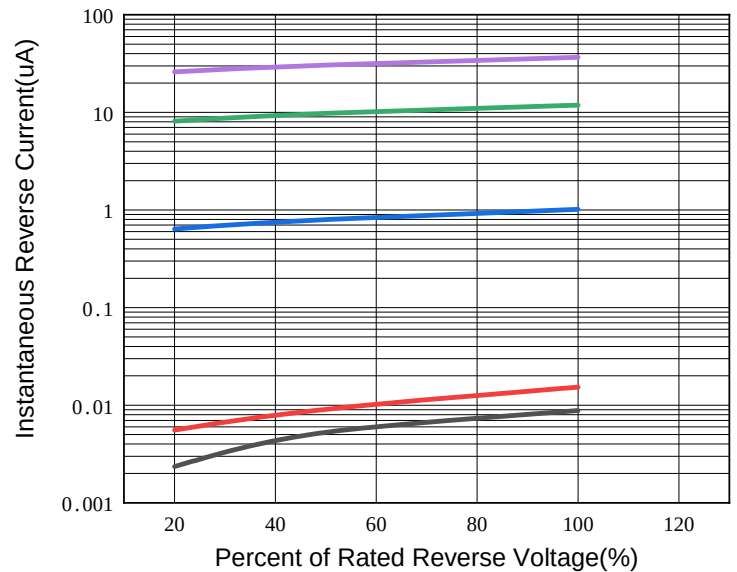


Fig.4:Typical Reverse Characteristics



■ Thermal Characteristics $T_a=25$ - Unless otherwise specified

PARAMETER	SYMBOL	UNIT	FMG1AEQ	FMG1BEQ	FMG1DEQ	FMG1GEQ	FMG1JEQ
Thermal resistance	$R_{\theta J-A}$	- /W	270 ¹				
	$R_{\theta J-L}$		90 ¹				
	$R_{\theta J-SP}$		10 ²				

Note:

- (1) Thermal resistance between junction and ambient and between junction and lead mounted on P.C.B without copper pad areas.
- (2) Thermal resistance between junction and cathode tab solder point.



FMG1AEQ THRU FMG1JEQ

■ Marking Information

■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
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