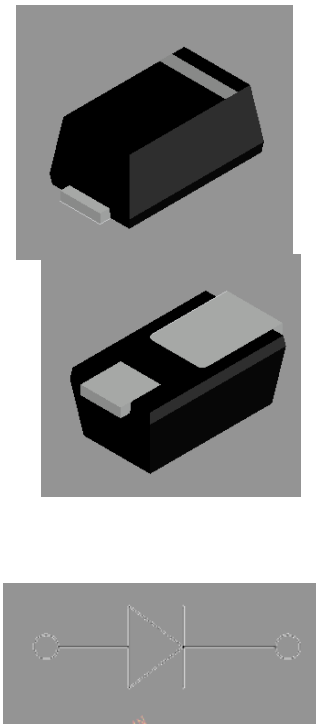
Surface Mount Schottky Rectifier



Features

- ●Low profile package
- ● Ideal for automated placement
- ● Guardring for overvoltage protection
- ● Low power losses, high efficiency
- ● High forward surge capability
- ● Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- ● Part no. with suffix “Q” means AEC-Q101 qualified

Typical Applications

For use in low voltage high frequency inverters, freewheeling, DC/DC converters, automotive and polarity protection applications.

Mechanical Date

- ● **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_j=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	FM16EQ
Device marking code			16
Repetitive peak reverse voltage	V_{RRM}	V	60
Maximum RMS voltage	V_{RMS}	V	42
Maximum DC blocking voltage	V_{DC}	V	60
Maximum average forward rectified current at T_L (Fig.1)	IF $_{AV}$	A	1.0
Surge(non-repetitive)forward current @60Hz half-sine wave,1 cycle, T_J=25	I_{FSM}	A	30
Voltage rate of change (rated V_R)	dV/dt	V/μs	10000
Storage temperature	T_{stg}		

						UNIT
Instantaneous forward voltage	V_F	I_F=1A	T_J=25	0.6	0.7	V
			T_J=125	-	0.55	
Reverse current	I_R	Rated V_R	T_J=25	-	50	uA
			T_J=125	-	10	mA
Typical junction capacitance	C_J	V_R=4V,f=1MHz		45	-	pF

■**Thermal Characteristics** (T_a=25 Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	FM16EQ
	$R_{\theta J-A}$		260 [1]
Thermal resistance	$R_{\theta J-L}$	/W	

■ Marking Information

■ Outline Dimensions

SOD-323HE		
Dim	Millimeters	
	Min	Max

■ Suggested pad layout

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with automotive electronics,are not designed for use in medical, li® d]ʻ ʻ ʻ -