

Schottky Barrier Rectifier, 12.0 A

Features

- Diffused junction
- Low cost
- Low reverse leakage current
- High surge current capability & low forward voltage drop
- Polarity: Color Band denotes Cathode
- High efficiency

Mechanical Data

- Case: JEDEC R-6 molded plastic
- Polarity: Color band denotes cathode
 - Weight: 2.1 grams
 - Mounting position: Any

Thermal Specifications (T _C = 25°C unless otherwise specified)			
Parameters	Symbol	Values	Units
Maximum operating junction temperature range	T _J	-55 to +200	°C
Maximum storage temperature range	T _{STG}	-55 to +200	°C
Typical thermal resistance junction to case	R _{θJC}	3.0	°C/W



JEDEC R-6

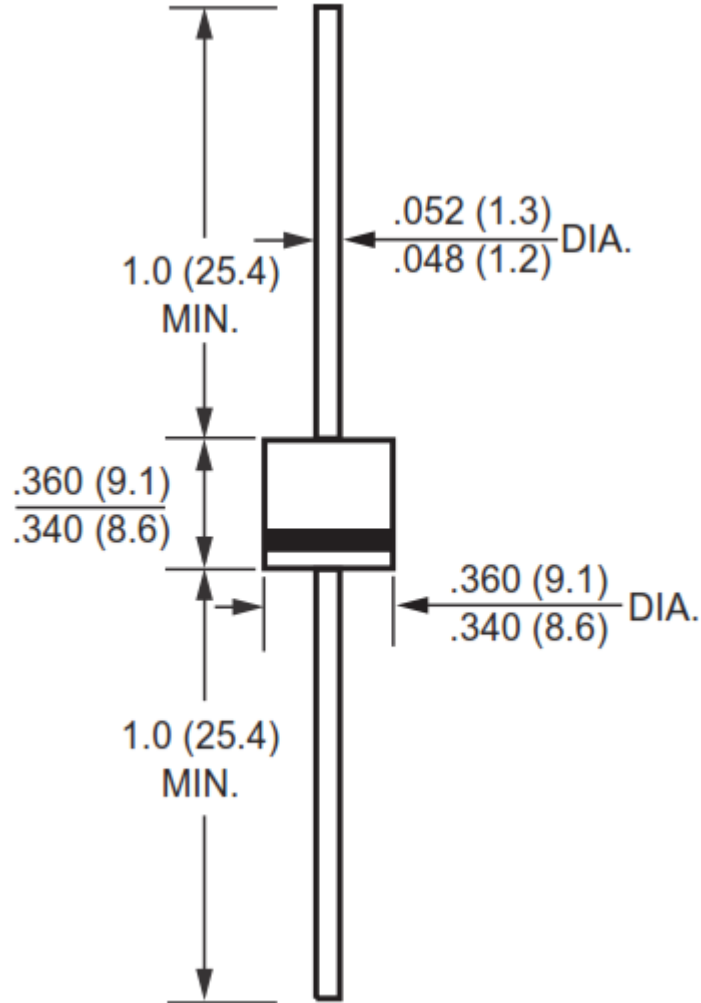
Electrical Characteristics (T _C = 25°C unless otherwise specified)											
Parameter	Symbol	12SQ030	12SQ035	12SQ040	12SQ045	12SQ050	12SQ060	12SQ080	12SQ100	Units	
Maximum repetitive peak reverse voltage	V _{RRM}	30	35	40	45	50	60	80	100	V	
Maximum RMS voltage	V _{RMS}	21	24.5	28	31.5	35	42	56	70	V	
Maximum DC blocking voltage	V _{DC}	30	35	40	45	50	60	80	100	V	
Maximum average forward output current @ T _C = 95°C	I _{F(AV)}	12								A	
Peak forward surge current (8.3ms) single half sine-wave superimposed on rated load	I _{FSM}	275								A	
Forward voltage drop @ 12A DC (Note 1)	V _F	0.55				0.7		0.8		V	
Typical junction capacitance (Note 2)	C _J	450								pF	
Maximum DC reverse current at rated DC blocking voltage	T _A = 25°C	I _R								0.5	mA
	T _A = 100°C									50	

NOTES:

- (1) 300 μs, pulse width, 2% duty cycle
- (2) Measured at 1.0 MHz and reverse voltage of 4.0 VDC.

Package Outlines

R-6



Dimensions in inches and (millimeters)