Schottky Barrier Rectifier, 10.0 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

JEDEC R-6

Thermal Specifications (T_C = 25°C unless otherwise specified)			
Parameters	**Symbol**	**Values**	**Units**
Maximum operating junction temperature range	T_J	-55 to +150	°C
Maximum storage temperature range	T_{STG}	-55 to +150	°C
Typical thermal resistance junction to case	$R_{\theta JC}$	3.0	°C/W

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	$I_{F(AV)}$	10								A
Peak forward surge current (8.3ms) single half sine-wave superimposed on rated load	I_{FSM}	275								A
Forward voltage drop @ 10A DC (Note 1)	V_F	0.55				0.7		0.8		V
Typical junction capacitance (Note 2)	CJ	450								pF
Maximum DC reverse current at rated DC blocking voltage, T_A = 25°C	I_R	0.5								mA
Maximum DC reverse current at rated DC blocking voltage, T_A = 100°C	I_R	50								mA

NOTES:

(1) 300 µs, pulse width, 2% duty cycle

(2) Measured at 1.0 MHz and reverse voltage of 4.0 VDC.

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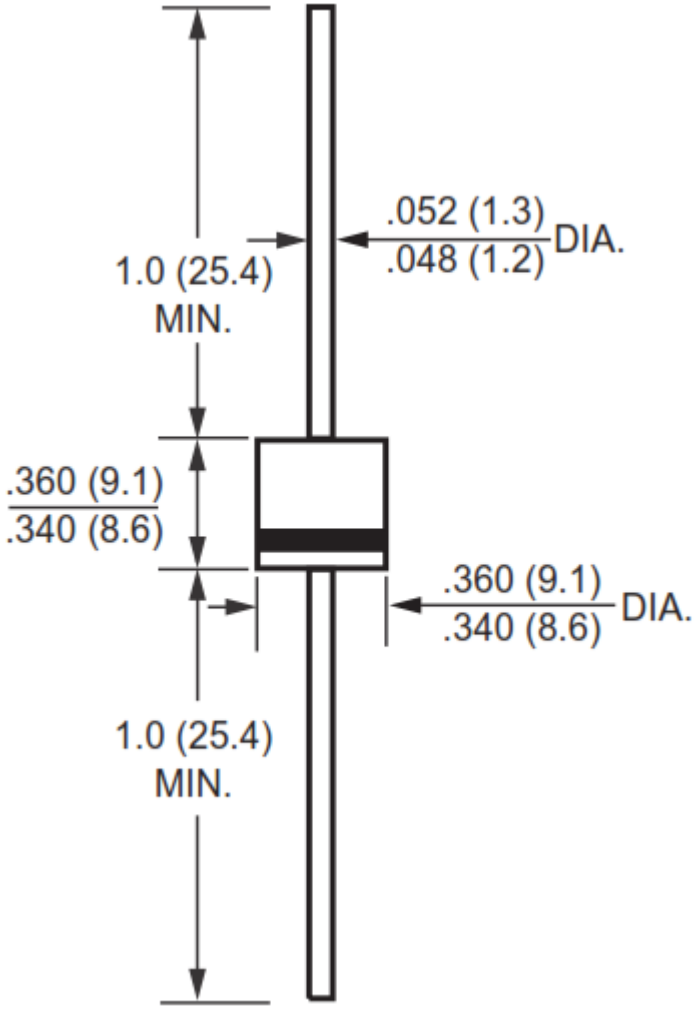
Package Outlines

R-6



Dimensions in inches and (millimeters)

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