

Schottky Barrier Rectifiers Reverse Voltage 20V to 60V Forward Current 1.0A Amperes

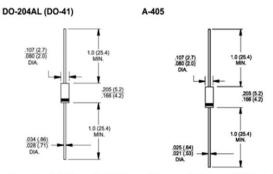
Features

- Metal-Semiconductor junction with guardring
- · Epitaxial construction
- · Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Mechanical Data

- Case: JEDEC DO-204AL(DO-41)/A-405 molded plastic
 Polarity: Color band denotes cathode end
- Weight: DO-41-0.012 ounce, 0.33 gram A-405-0.008 ounce, 0.22 gram
- Mounting position: Any





Dimensions in inches and (millimeters) Dimensions in inches and (mi Note: Lead diameter is 0.025(0.64)/0.021(0.53) for suffix "S" part numbers

MAXIMUM RATINGS and ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load. For capactive load, derate current by 20%

PARAMETER		SYMBOL	SB120	SB130	SB140	SB150	SB160	Units
Maximum repetitive peak reverse voltage		VRRM	20	30	40	50	60	V
Maximum RMS voltage		VRMS	14	21	28	35	42	V
Maximum DC blocking voltage		VDC	20	30	40	50	60	V
Maximum average forward rectified current 0.375"(9.5mm) lead length at $T_L \! = \! 100^{\circ}\!\mathrm{C}$		IF(AV)	1.0					А
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load		IFSM	40					А
Maximum forward voltage at 1A DC		VF	0.5 0.7).7	V	
Maximum DC reverse current at rated DC blocking voltage	TJ=25℃	15	0.5					mA
	T _J =125℃	IR	8					mA
Typical junction capacitance (Note 1)		C _j	110					pF
Typical thermal resistance(Note 2)		R _{eJA}	76					
		$R_{ heta JC}$	41					°C/W
		R _{θJL}	32					
Operating junction temperature range		TJ		- 55 to + 125		- 55 to	o + 150	°C
storage temperature range		T _{STG}	- 55 to + 150					$^{\circ}$

Notes: 1. Measured at 1.0 MHZ and applied reverse voltage of 4.0V DC

2. Thermal Resistance at .375(9.5mm) Lead Length, PC Board Mounted



RATINGS AND CHARACTERISTICS CURVES

