

1N5823 - 1N5825

SCHOTTKY BARRIER RECTIFIER DIODE

VOLTAGE RANGE: 20 - 40V CURRENT: 5.0 A

Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- High Current Capability
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

Mechanical Data

Case: DO-201AD, Molded Plastic

Terminals: Plated Leads Solderable per

MIL-STD-202, Method 208

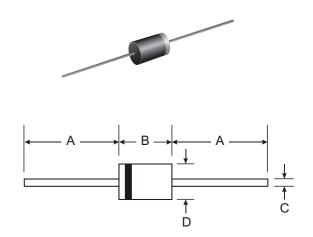
Polarity: Cathode Band

• Weight: 1.2 grams (approx.)

Mounting Position: Any

Marking: Type Number





DO-201AD					
Dim	Min	Max			
Α	25.40	_			
В	8.50	9.53			
С	0.96	1.06			
D	4.80	5.21			
All Dimensions in mm					

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

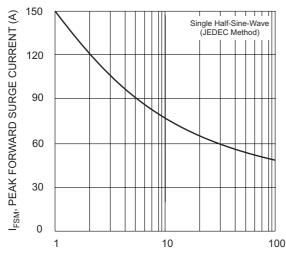
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	1N5823	1N5824	1N5825	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	20	30	40	V
RMS Reverse Voltage	VR(RMS)	14	21	28	V
Average Rectified Output Current @T _L = 100°C (Note 1)	lo	5.0			А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	İFSM		150		А
Forward Voltage @I _F = 5.0A	VFM		0.55		>
	IRM	0.5 50			mA
Typical Junction Capacitance (Note 2)	Cj		500		pF
Typical Thermal Resistance (Note 1)	$R_{ heta}$ JA		10		°C/W
Operating and Storage Temperature Range	Тj, Tsтg		-65 to +150		°C

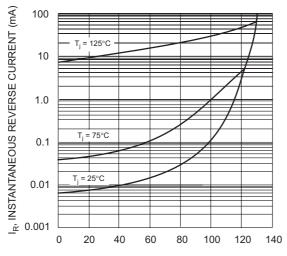
Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

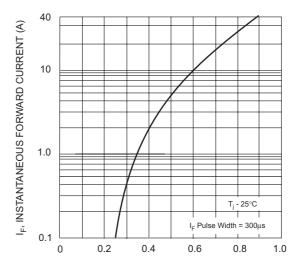




NUMBER OF CYCLES AT 60Hz Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 5 Typical Reverse Characteristics



 V_{F} , INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics

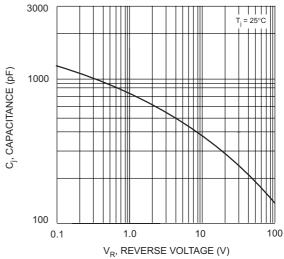


Fig. 4 Typical Junction Capacitance