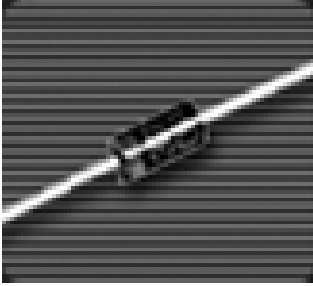



<b>DO-41</b>		<b>Features</b>					
		<ul style="list-style-type: none"> <li>● Metal-Semiconductor junction with guardring</li> <li>● Epitaxial construction</li> <li>● Low forward voltage drop</li> <li>● High current capability</li> <li>● Moisture sensitivity: level 1, per J-STD-020</li> <li>● AEC-Q101 qualified</li> <li>● High temperature soldering guaranteed: 260°C/10 seconds</li> <li>● Halogen-free according to IEC 61249-2-21 definition</li> </ul> <div style="text-align: right; margin-top: 10px;">  </div>					
<b>Primary characteristics</b>		<b>Applications</b>					
$I_{F(AV)}$	1A	For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications					
$V_{RRM}$	70V to 100V						
$I_{FSM}$	30A						
$I_{RM}$	0.5mA						
$V_{FM}$ at $I_F=1A$	0.79V						
$T_J$ max.	150 °C						
		<b>Mechanical data</b>					
		<ul style="list-style-type: none"> <li>● DO-41</li> <li>● Epoxy meets UL 94 V-0 flammability rating</li> <li>● Terminals: Tin plated leads.</li> <li>● Polarity: As marked.</li> </ul>					
<b>Maximum rating (Ta=25°C unless otherwise noted)</b>							
Parameter	Sym	DO-41				Unit	
		SB170	SB180	SB190	SB1B0		
Max. repetitive peak reverse voltage	$V_{RRM}$	70	80	90	100	V	
Max. RMS reverse voltage	$V_{RMS}$	49	56	63	70	V	
Max. DC blocking voltage	$V_{DC}$	70	80	90	100	V	
Max. average forward current	$I_{F(AV)}$	1				A	
Non-repetitive peak forward surge current 8.3ms single half-sine-wave	$I_{FSM}$	30				A	
Max. instantaneous forward voltage drop per diode	$V_{FM}$	0.79				V	
Max. instantaneous reverse current at rated DC blocking voltage	Ta=25 °C	0.5				mA	
	Ta=125 °C	5					
Operating junction temperature	$T_J$	-55 ~ +150				°C	
Storage temperature	$T_{STG}$	-55 ~ +150				°C	
Typical thermal resistance (Note1)	$R_{\theta J-L}$	35				°C/W	

**Notes:**

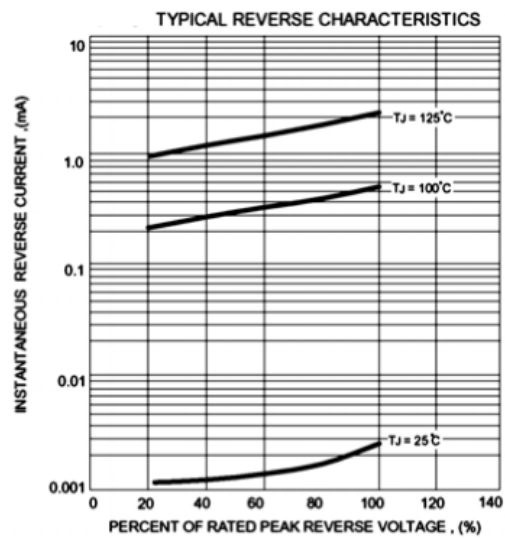
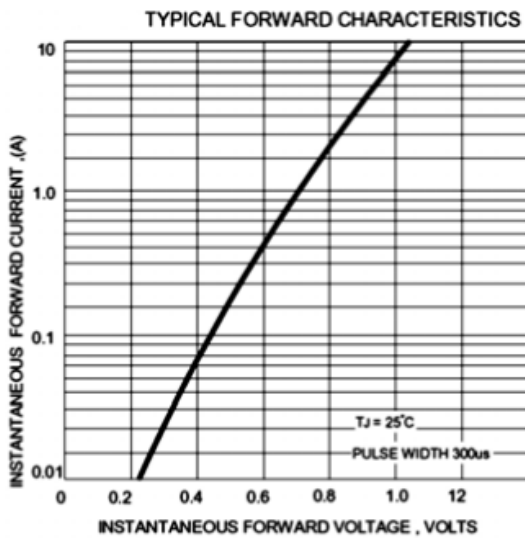
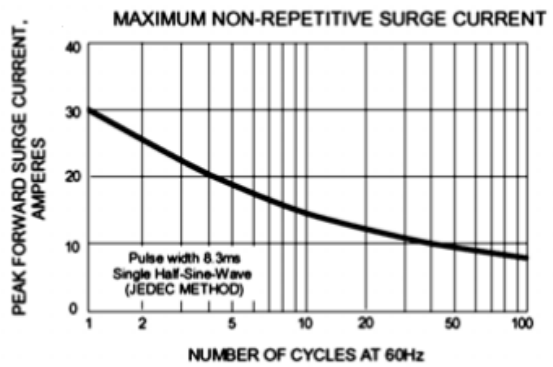
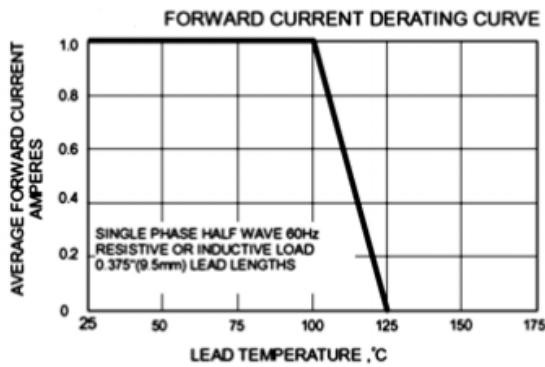
1 The thermal resistance from junction to lead



Ordering information (Example)

PREFERRED	UNITWEIGHT(g)	PREFERREDPACKAGECODE	BASEQUANTITY	DELIVERYMODE
SB170				

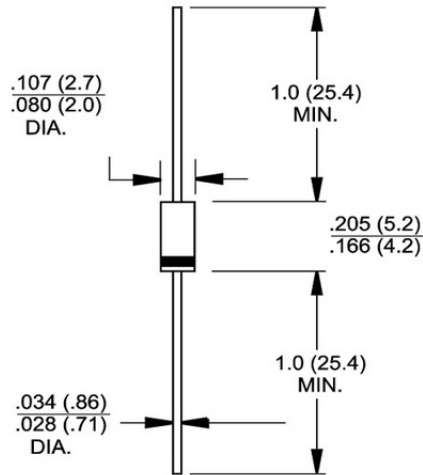
Typical characteristics





**Package outline dimensions**

**DO-204AL (DO-41)**



**Dimensions in inches and (millimeters)**

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