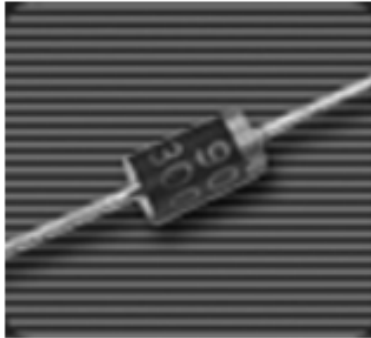


**DO-27**



**Features**

- Metal-Semiconductor junction with guardring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- Moisture sensitivity: level 1, per J-STD-020
- AEC-Q101 qualified
- High temperature soldering guaranteed: 260°C/10 seconds
- Halogen-free according to IEC 61249-2-21 definition



**Primary characteristics**

$I_{F(AV)}$	3A
$V_{RRM}$	70V to 100V
$I_{FSM}$	100A
$I_{RM}$	0.5mA
$V_{FM}$ at $I_F=3A$	0.79V
$T_J$ max.	150 °C

**Applications**

For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

**Mechanical data**

- DO-27
- Epoxy meets UL 94 V-0 flammability rating
- Terminals: Tin plated leads.
- Polarity: As marked.

**Maximum rating (Ta=25°C unless otherwise noted)**

Parameter	Sym	DO-27				Unit
		SB370	SB380	SB390	SB3B0	
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	$I_{F(AV)}$	3				A
Non-repetitive peak forward surge current 8.3ms single half-sine-wave	$I_{FSM}$	100				A
Max. instantaneous forward voltage drop per diode	$V_{FM}$	0.79				V
Max. instantaneous reverse current at rated DC blocking voltage	$I_{RM}$	0.5				mA
		20				
Operating junction temperature	$T_J$	-55 ~ +150				°C
Storage temperature	$T_{STG}$	-55 ~ +150				°C
Typical thermal resistance (Note1)	$R_{\theta J-L}$	25				°C/W

**Notes:**

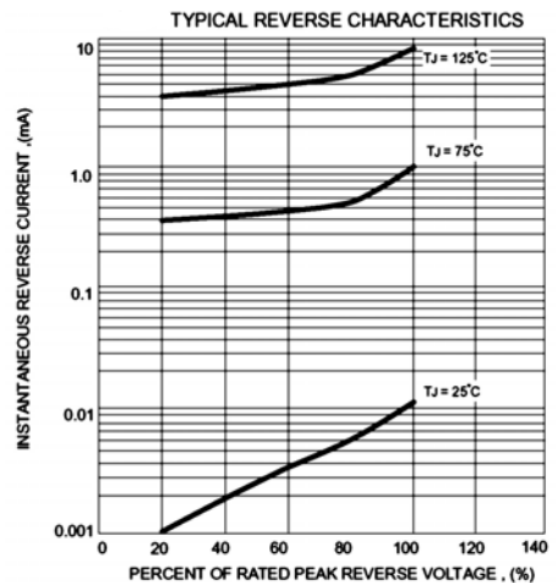
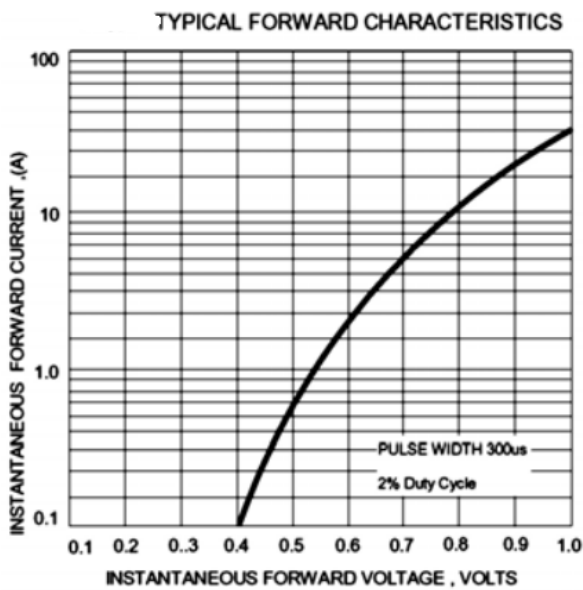
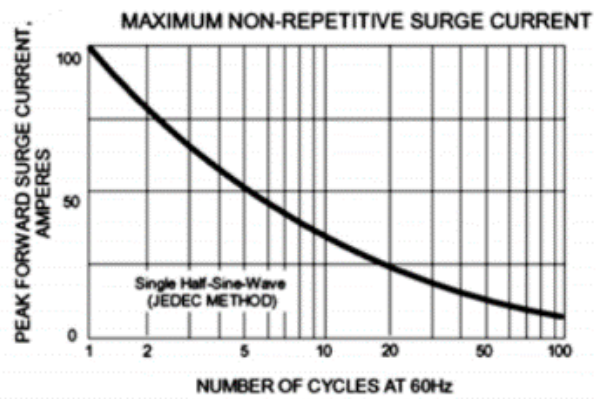
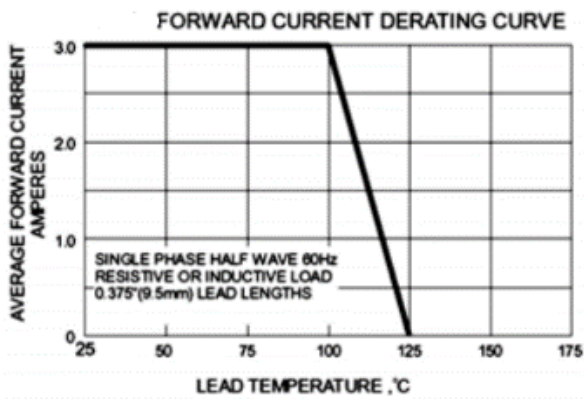
1 The thermal resistance from junction to lead



Ordering information (Example)

PREFERRED	UNITWEIGHT(g)	PREFERREDPACKAGECODE	BASEQUANTITY	DELIVERYMODE
SB370				

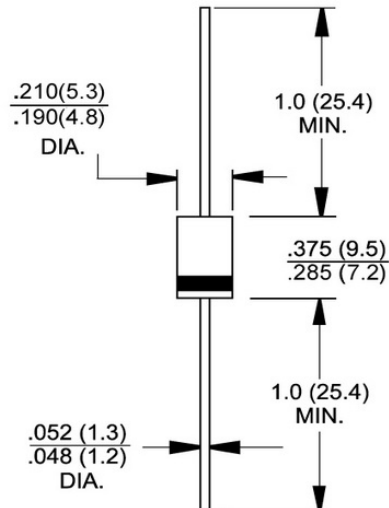
Typical characteristics





Package outline dimensions

DO-201AD



Dimensions in inches and (millimeters)

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