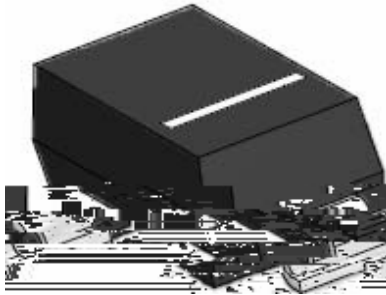


## High Speed Switching Diode

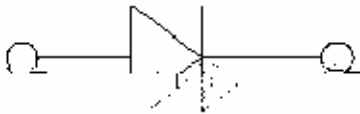


### Features

$V_R$  100V  
 $I_{FAV}$  250mA

### Typical Ay

Extreme fast switches



### Mechanical Data

**Package:** SOD323

**Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

**Polarity:** Cathode line denotes the cathode end

**Marking:** A6

### Maximum Ratings ( $T_a=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	$V_{RRM}$	V		100
Peak forward surge current	$I_{FSM}$	A	$t_p=300\mu s$	2
Average forward current	$I_{FAV}$	mA		250
Power dissipation	$P_{tot}$	mW		200
Thermal Resistance	$R_{thJA}$	K/W		625
Maximum junction temperature	$T_j$			-55 to +150
Storage temperature range	$T_{stg}$			-55 to +150

### Electrical Characteristics $T_a=25$ Unless otherwise specified

PARAMETER	SYMBOL	UNIT	Conditions	Min	Max
Maximum Forward voltage	$V_F$	V	$I_F=1mA$		0.715
			$I_F=10mA$		0.855
			$I_F=50mA$		1.00
			$I_F=150mA$		1.25
Maximum Reverse current	$I_R$	nA	$V_R=20V$		25
	$I_R$	$\mu A$	$V_R=75V$		1.0
Minimum Breakdown voltage	$V_R$	V	$I_R=100\mu A$	100	
Maximum Diode capacitance	$C_D$	pF	$V_R=V_F=0V, f=1MHz$		4
Maximum Reverse recovery time	$t_{rr}$	ns	$I_F=10mA, V_R=6V, I_{rr}=1mA, R_L=100$		4



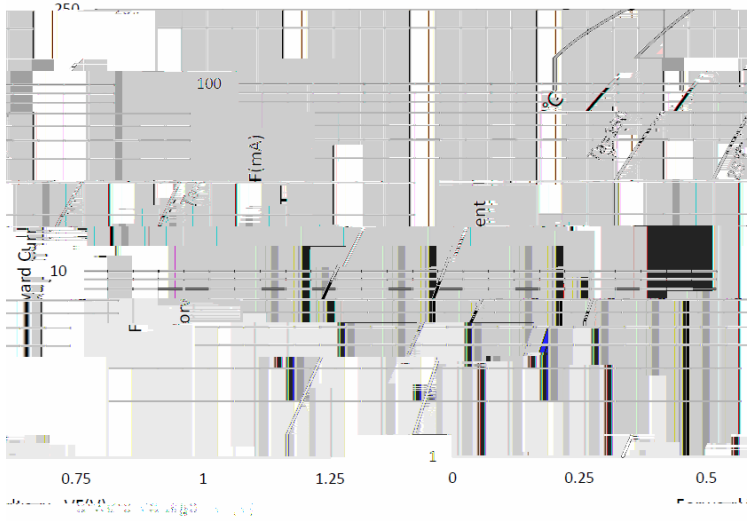
# BAS316

## Ordering Information (Example)

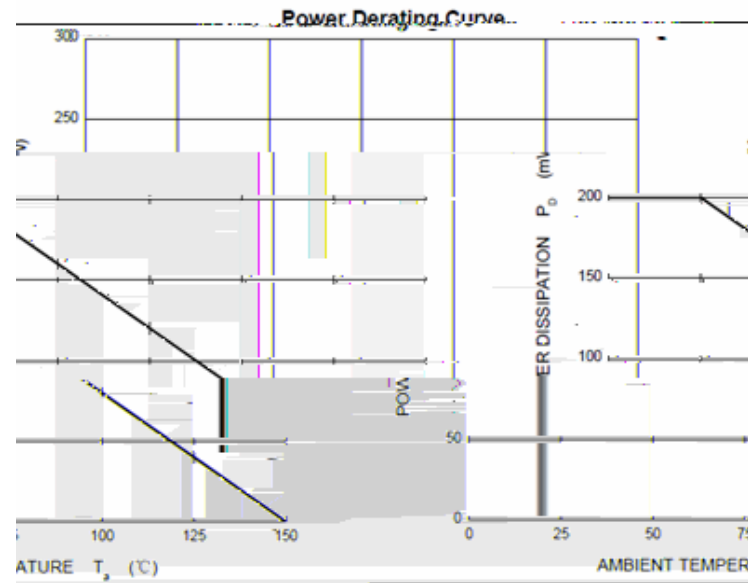
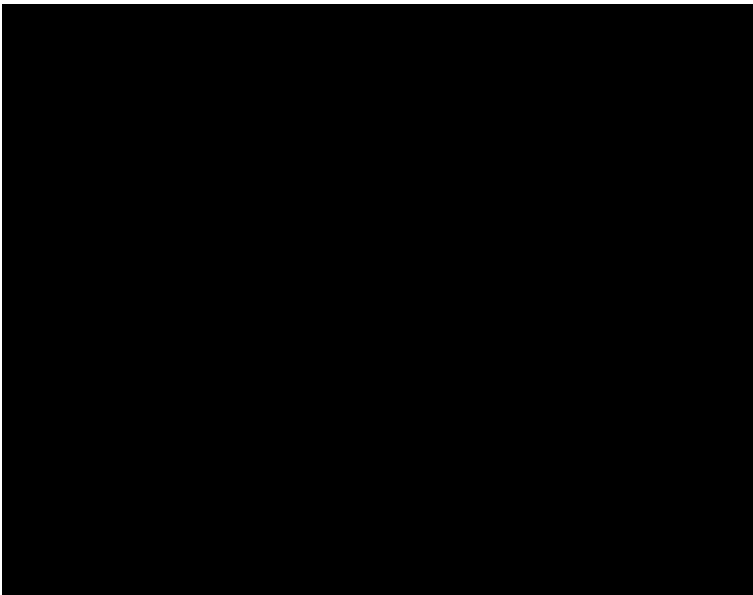
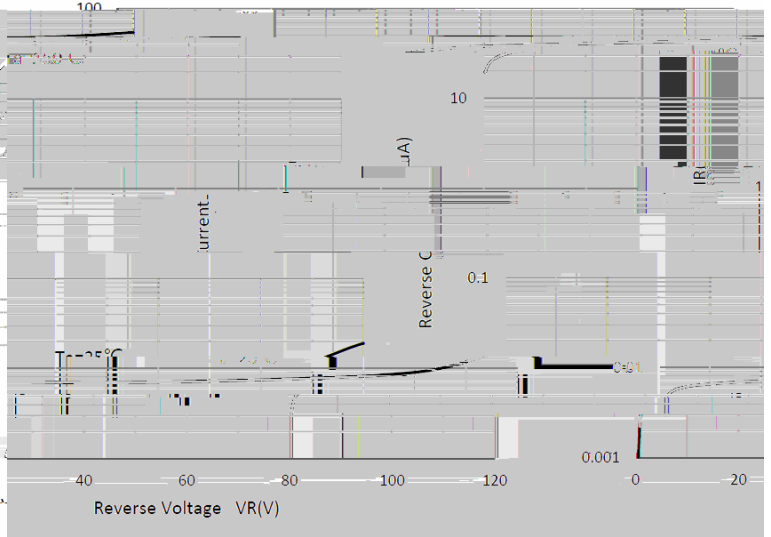
PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS316	F2	Approximate 0.0048	3000	30000	120000	7" reel

## Characteristics (Typical)

VF-IF



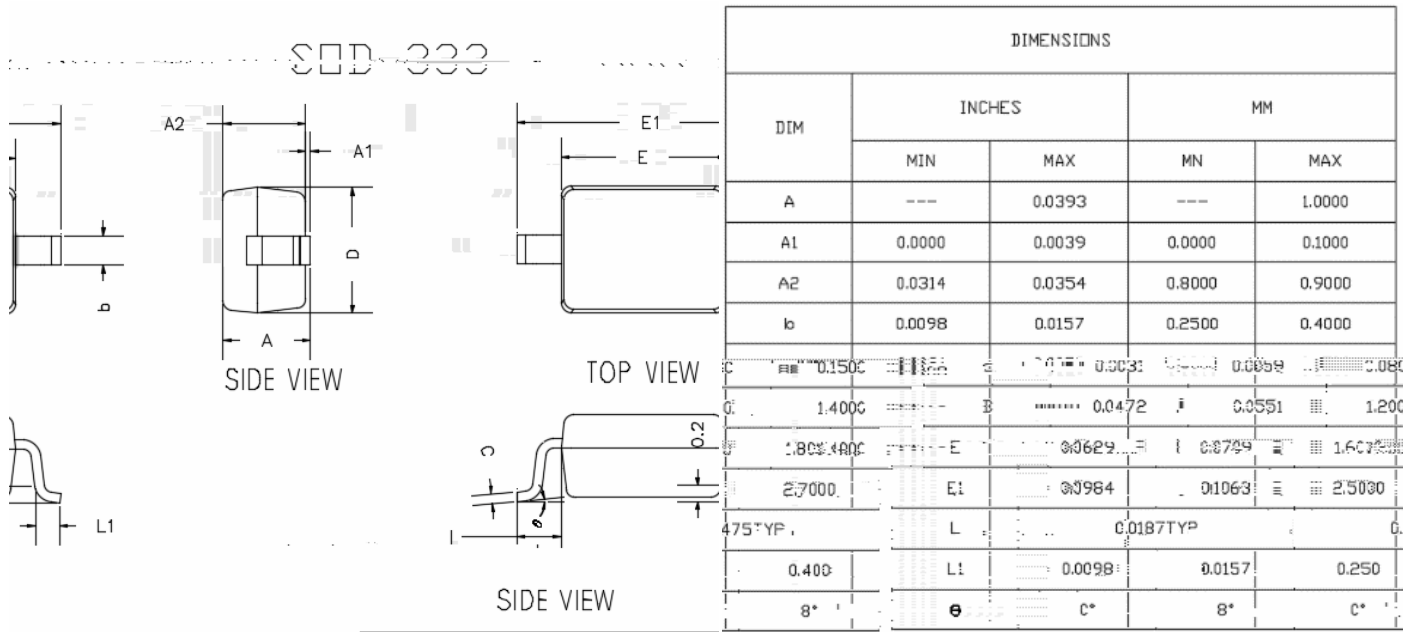
IR-VR



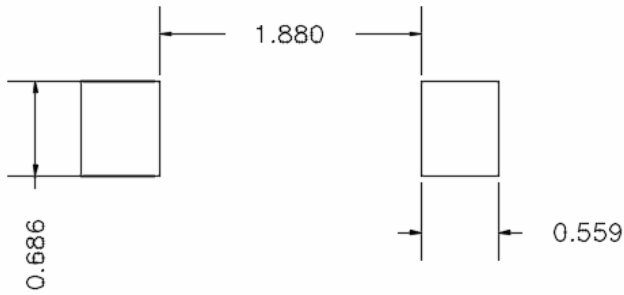


# BAS316

## Outline Dimensions



## Soldering Footprint



UNIT: mm

SUGGESTED SOLDER PAD LAYOUT



## BAS316

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### Disclaimer

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The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety