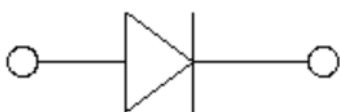


General Purpose Pin Diodes



Features

- Moisture sensitivity level 1
- Low diode capacitance
- Low diode forward resistance
- Small inductance

Application

- Surface mount band-switching circuits.

Mechanical data

- **Package:** SOD-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

■ Maximum Ratings ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Parameter	Symbol	Unit	Value
Device marking code			A2
Repetitive peak reverse voltage	V_{RRM}	V	35
Forward current	I_F	mA	100
Power dissipation	P_D	mW	150
Junction temperature	T_J	$^{\circ}\text{C}$	-55 to +125
Storage temperature	T_{STG}	$^{\circ}\text{C}$	-55 to +125

■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Breakdown voltage	V _R	V	I _R =10uA	35		
Forward voltage	V _F	V	I _F =10mA			1
Reverse leakage current	I _{R1}	nA	V _R =20V			20
Junction capacitance	C _{J1}	pF	V _R =1V, f =1MHZ		1.6	
	C _{J2}	pF	V _R =3V, f =1MHZ		1.3	
	C _{J3}	pF	V _R =6V, f =1MHZ		1.2	
Diode forward resistance	r _D	Ω	I _F =2mA; f=100MHz			0.9

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	R _{θJ-A} ⁽¹⁾	°C/W	666
Thermal resistance, junction-to-case	R _{θJ-C} ⁽¹⁾	°C/W	533

Note:

(1) Thermal resistance from junction to ambient and from junction to case mounted on P.C.B. with 8mm*9mm copper pad areas



■ Characteristics

Fig 1: P_D - T_a Curve

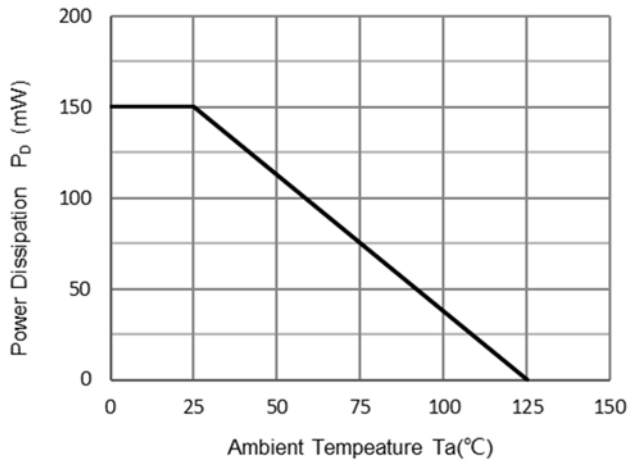


Fig 2: Capacitance Capability

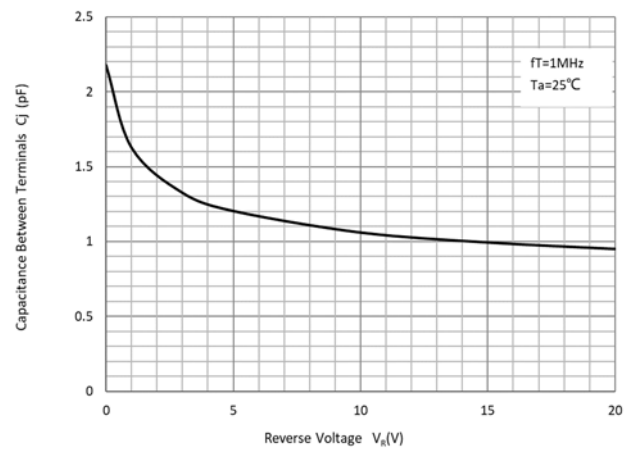
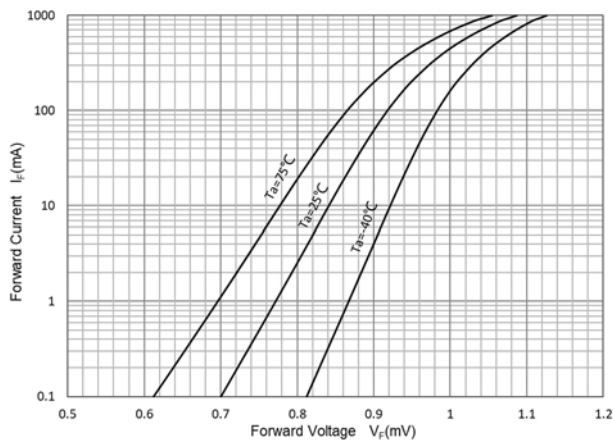


Fig 3: Typical Forward Characteristics





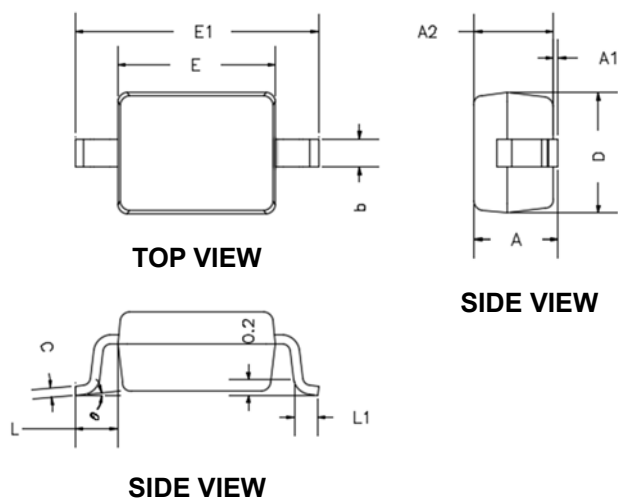
BA592

RoHS
COMPLIANT

■ Ordering Information

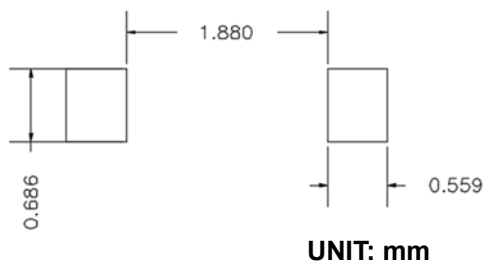
Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
BA592	F2	Approximate 0.0048	3000	30000	120000	7" reel
BA592	F3	Approximate 0.0048	10000	/	210000	13" reel

■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MM	MAX
A	---	0.0393	---	1.0000
A1	0.0000	0.0039	0.0000	0.1000
A2	0.0314	0.0354	0.8000	0.9000
b	0.0098	0.0157	0.2500	0.4000
c	0.0031	0.0059	0.0800	0.1500
D	0.0472	0.0551	1.2000	1.4000
E	0.0629	0.0709	1.6000	1.8000
E1	0.0984	0.1063	2.5000	2.7000
L	0.0187TYP		0.475TYP	
L1	0.0098	0.0157	0.250	0.400
θ	0°	8°	0°	8°

■ Suggested Pad Layout





Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function, or design or otherwise.

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 devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.