

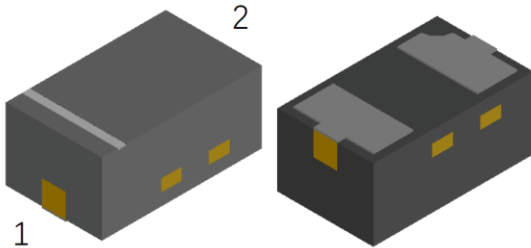
## Small Signal Schottky Diode

### Features

- Moisture sensitivity level 3
- Reverse voltage: 30V
- Average forward current: 500mA

### Application

- High frequency and low voltage rectifier



### Mechanical data

- **Package:** DFN1006-2L
- **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			AM
Repetitive peak reverse voltage	$V_{RRM}$	V	30
Forward current	$I_F$	mA	500
Non-repetitive surge peak forward current @ $t=8.3\text{ms}$ half-sine wave	$I_{FSM}$	A	2
Non-repetitive surge peak forward current @ $t=1\text{ms}$ square wave			3
Repetitive Peak Forward Current @ $t_p=1\text{ms}$ , $\delta=0.25$	$I_{FRM}$	A	1
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<sub>a</sub>=25°C Unless otherwise specified)

Parameter	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	V <sub>R</sub>	V	I <sub>R</sub> =1mA	30		
Reverse voltage leakage current	I <sub>R</sub>	uA	V <sub>R</sub> =10V			200
			V <sub>R</sub> =30V			300
Forward voltage	V <sub>F</sub>	mV	I <sub>F</sub> =0.1mA			180
			I <sub>F</sub> =1mA			200
			I <sub>F</sub> =10mA			270
			I <sub>F</sub> =100mA			360
			I <sub>F</sub> =500mA			500
Capacitance	C <sub>J</sub>	pF	V <sub>R</sub> =5V, f=1MHz			15

## ■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	R <sub>θJ-A</sub> <sup>(1)</sup>	°C/W	667
Thermal resistance, junction-to-case	R <sub>θJ-C</sub> <sup>(1)</sup>	°C/W	535

Note:

(1) Thermal resistance from junction to ambient and from junction to case mounted on P.C.B. with 4.5\*6.5cm copper pad



■ Characteristics

Fig 1:  $P_D$ - $T_a$  Curve

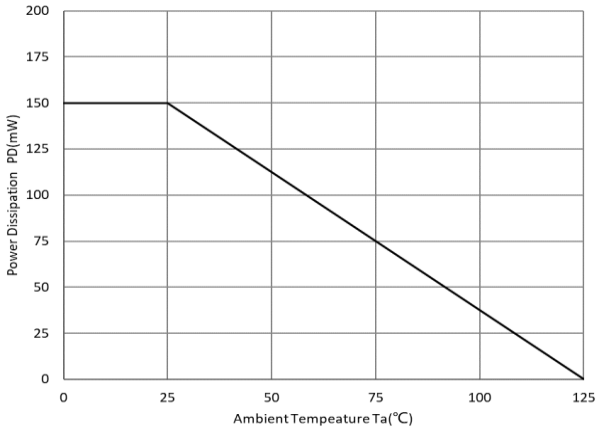


Fig 2: Capacitance Capability

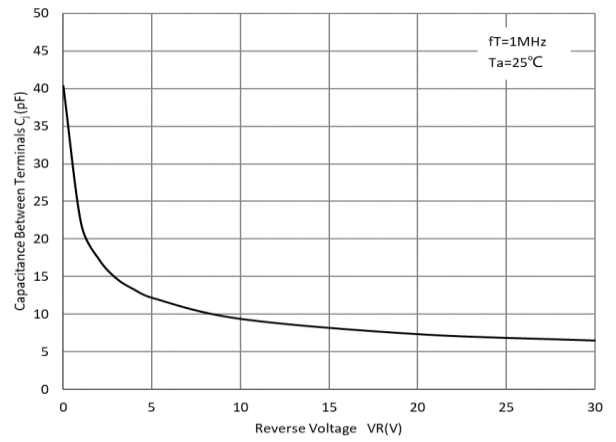


Fig 3: Typical Forward Characteristics

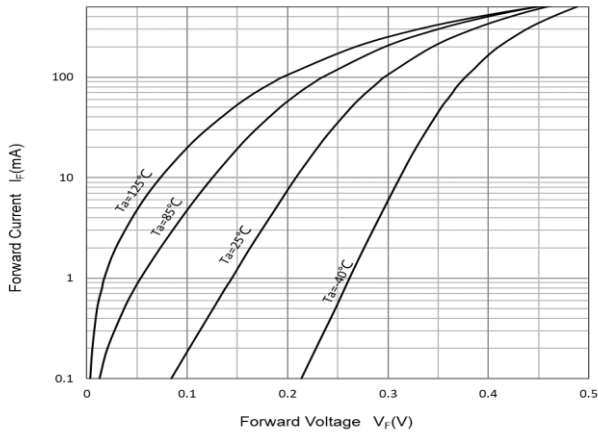
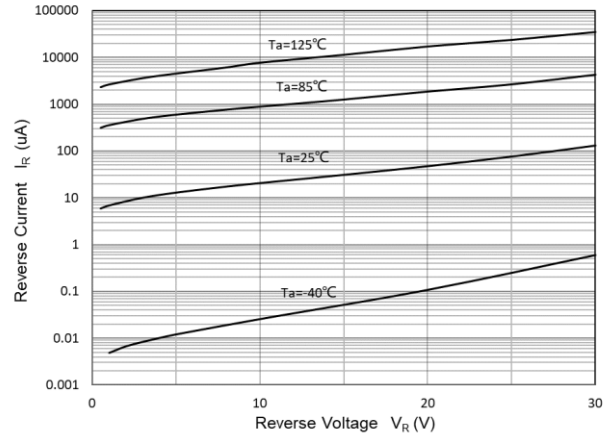


Fig 4: Typical Reverse Characteristics





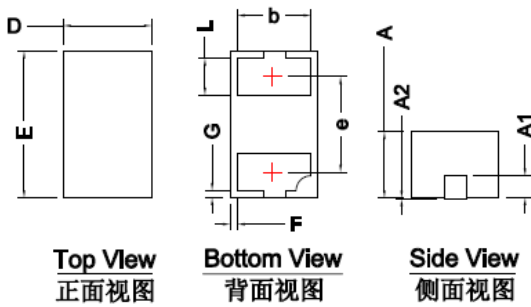
# PMEG3005EL

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## ■ Ordering Information

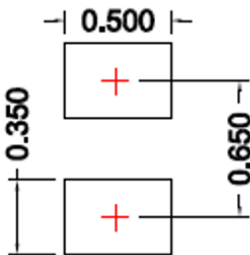
Preferred P/N	Packing Code	Unit Weight(mg)	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
PMEG3005EL	F1	Approximate 0.9	10000	100000	400000	Tape & Reel

## ■ Outline Dimensions



SYMBOL	MILLIMETER		
	MIN	NOM	MAX
D	0.50	0.60	0.70
E	0.90	1.00	1.10
A	0.35	0.45	0.55
A1	0.15 BSC		
A2			0.10
F	0.005		
G	0.005		
L	0.15	0.25	0.35
b	0.41	0.50	0.59
e	0.65 BSC		

## ■ Suggested Pad Layout





## PMEG3005EL

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