

IMP11

Ultra high speed switching

- 1) Small mold type. (SMD6)
- 2) High reliability

Silicon epitaxial planar

The drawing shows the mechanical specifications for the JEDEC SOT-457 package (P11). The top view shows a rectangular package with a central rectangular area labeled 'P11'. There are six leads: (1) and (2) on the bottom, (3) and (4) on the left, and (5) and (6) on the right. Dimensions include a total width of 2.9 ± 0.2 , a lead width of 0.3 ± 0.1 , a lead pitch of 0.95 , and a lead length of 1.9 ± 0.2 . The side view shows a maximum height of 2.8 ± 0.2 and a lead height of $1.6^{+0.2}_{-0.1}$. The package is labeled with 'P11' and a pin number '1'.

ROHM : SMD6
JEDEC : SOT-457
JEITA : SC-74
□ : week code
■ : 1Pin Mark

Diagram of the SMD6 footprint dimensions. The footprint is a 2x3 grid of pads. The overall width is 1.9, divided into three equal segments of 0.95. The overall height is 2.4, divided into two equal segments of 1.2. The pad dimensions are 0.45 by 0.6. The spacing between pads is 0.35. The dimensions are labeled as 1.9, 0.95, 0.95, 2.4, 1.2, 0.45, 0.6, 0.35, 0.35, 0.35, 0.45, 0.8MIN., and 1.0MIN.

Technical drawing of a mechanical part, showing top and side views with dimensions.

Top View Dimensions:

- Overall width: 80 ± 0.2
- Overall length: 32 ± 0.1
- Distance between first two holes: 4.0 ± 0.1
- Distance between second and third holes: 2.0 ± 0.05
- Distance between fourth and fifth holes: 4.0 ± 0.1
- Distance from right edge to center of last hole: 3.2 ± 0.1
- Distance from bottom edge to center of last hole: 9.5 ± 0.2
- Distance from bottom edge to center of last hole (alternative): $0 \sim 0.5$
- Distance from bottom edge to center of last hole (alternative): 3.5 ± 0.05
- Distance from bottom edge to center of last hole (alternative): 1.75 ± 0.1
- Hole diameter: $\phi 1.55 \pm 0.1$
- Feature: $\phi 1.05 \text{ MN}$

Side View Dimensions:

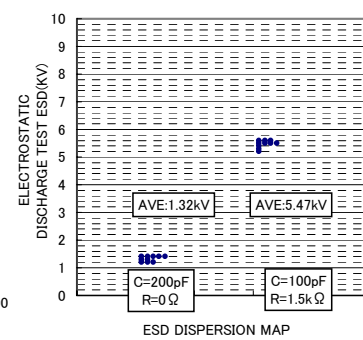
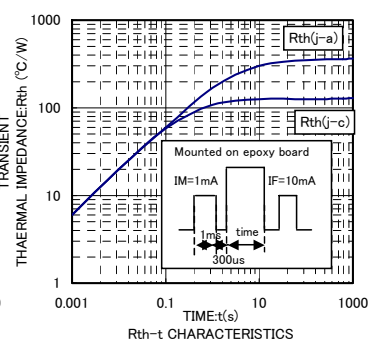
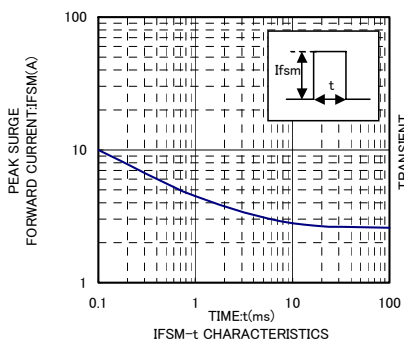
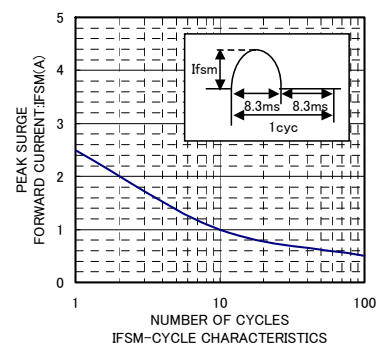
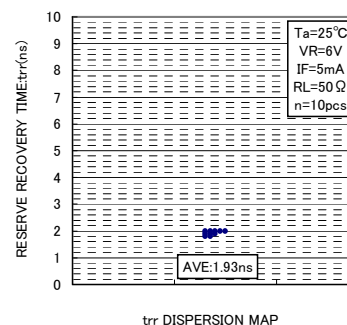
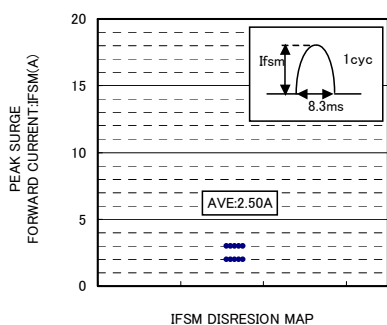
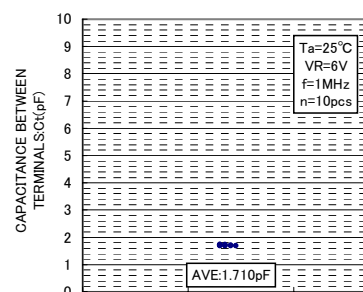
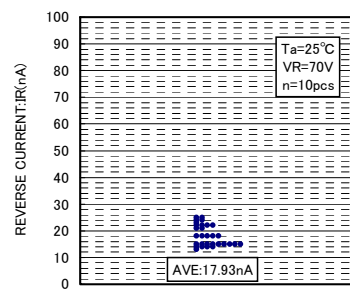
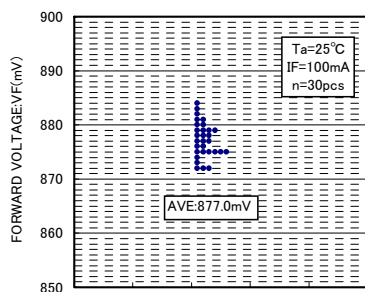
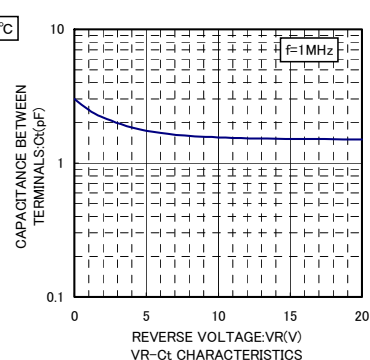
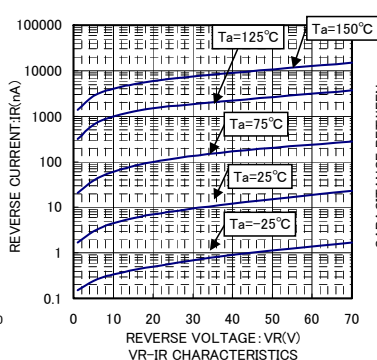
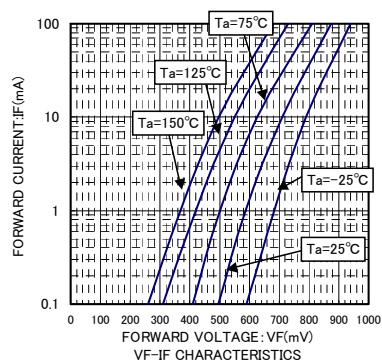
- Overall height: 32 ± 0.1
- Top flange thickness: 0.3 ± 0.1
- Bottom flange thickness: 1.35 ± 0.1

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	80	V
Reverse voltage (DC)	V_R	80	V
Forward current (Single)	I_{FM}	300	mA
Average rectified forward current (Single)	I_O	100	mA
Surge current ($t=1\mu s$) (Single)	I_{surge}	4	A
Power dissipation (TOTAL)(*1)	P_d	300	mW
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	-55 to +150	°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	1.2	V	$I_F=100\text{mA}$
Reverse current	I_R	-	-	0.1	μA	$V_R=70\text{V}$
Capacitance between terminals	Ct	-	-	3.5	pF	$V_R=6\text{V}$, $f=1\text{MHz}$
Reverse recovery time	t_{rr}	-	-	4	ns	$V_R=6\text{V}$, $I_F=5\text{mA}$, $R_L=50\Omega$

Diodes

●Electrical characteristic curves (Ta=25°C)



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