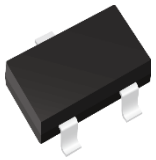
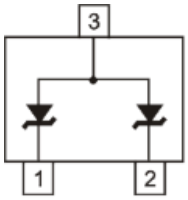
PJSOT24C-05-AU ~ PJSOT36C-05-AU Series

Hi-Surge ESD Protection

Voltage **24 ~ 36 V**

SOT-23





Features

- IEC61000-4-2(ESD): ±15kV Air, ±8kV Contact Compliance with the capability up to ±30kV
- IEC61000-4-4(EFT): 80A(5/50ns)
- IEC61000-4-5(Lightning): 9A ~ 12A (8/20uS)
- Low clamping voltage
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : SOT-23 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0003 ounces, 0.0084 grams

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
ESD IEC61000-4-2(Air) ESD IEC61000-4-2(Contact)	V_{ESD}	±30 ±30	kV
Typical Thermal Resistance(Note 1)	$R_{\theta JA}$	350	°C/W
Operating Junction Temperature Range	T_J	-55~150	°C
Storage Temperature Range	T_{STG}	-55~150	°C

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Electrical Characteristics (T_A = 25°C unless otherwise noted)

PJSOT24C-05-AU						
PARAMETER	**SYMBOL**	**TEST CONDITION**	**MIN.**	**TYP.**	**MAX.**	**UNITS**
Reverse Stand-Off Voltage(Note 2)	V_{RWM}	-	-	-	24	V
Reverse Breakdown Voltage	V_{BR}	I_{BT} = 1mA	26.7	-	29.4	V
Reverse Leakage Current	I_R	V_R = 24V	-	-	1	uA
Clamping Voltage	V_{CL}	I_{PP} = 1A, t_P = 8/20us	-	-	35	V
		I_{PP} = 12A, t_P = 8/20us	-	-	43	V
Off State Junction Capacitance	C_J	0Vdc Bias f = 1MHz	-	-	150	pF

PJSOT36C-05-AU						
PARAMETER	**SYMBOL**	**TEST CONDITION**	**MIN.**	**TYP.**	**MAX.**	**UNITS**
Reverse Stand-Off Voltage(Note 2)	V_{RWM}	-	-	-	36	V
Reverse Breakdown Voltage	V_{BR}	I_{BT} = 1mA	40	-	44.1	V
Reverse Leakage Current	I_R	V_R = 36V	-	-	1	uA
Clamping Voltage	V_{CL}	I_{PP} = 1A, t_P = 8/20us	-	-	53	V
		I_{PP} = 9A, t_P = 8/20us	-	-	75	V
Off State Junction Capacitance	C_J	0Vdc Bias f = 1MHz	-	-	100	pF

NOTES :

1. Mounted on a FR4 PCB, single-sided copper, standard footprint
2. A transient suppressor is selected according to the working peak reverse voltage(V_{RWM}), which should be equal to or greater than the DC or continuous peak operation voltage level

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TYPICAL CHARACTERISTIC CURVES

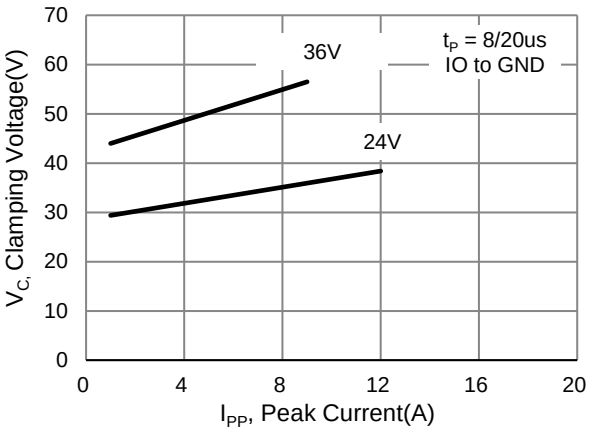

Fig.1 Typical Peak Clamping Voltage

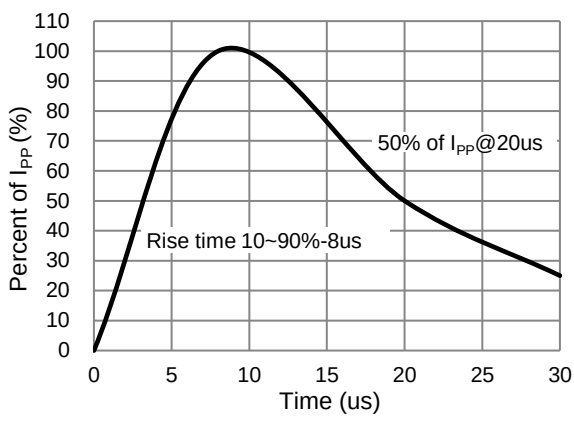

Fig.2 Pulse Waveform

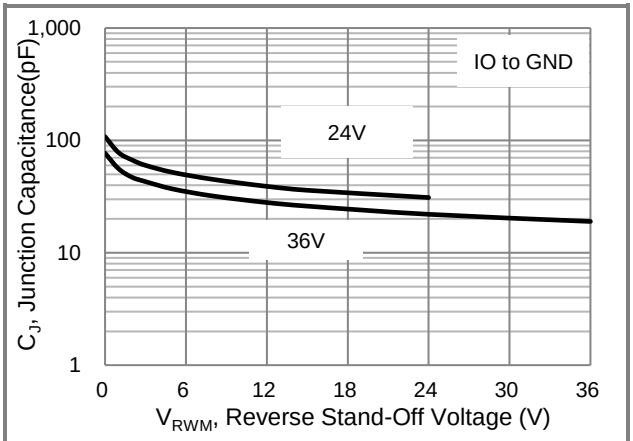

Fig.3 Typical Junction Capacitance

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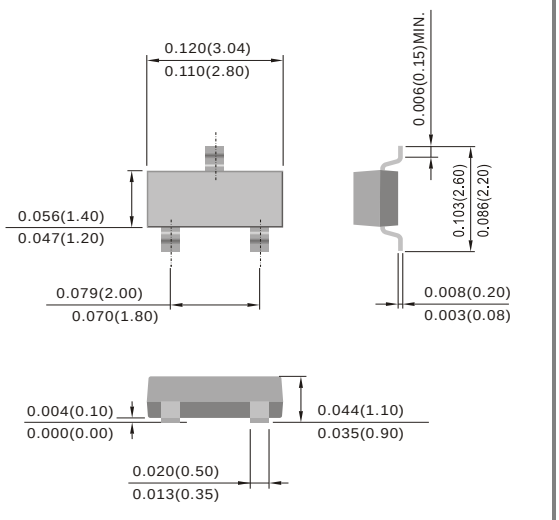
Product and Packing Information

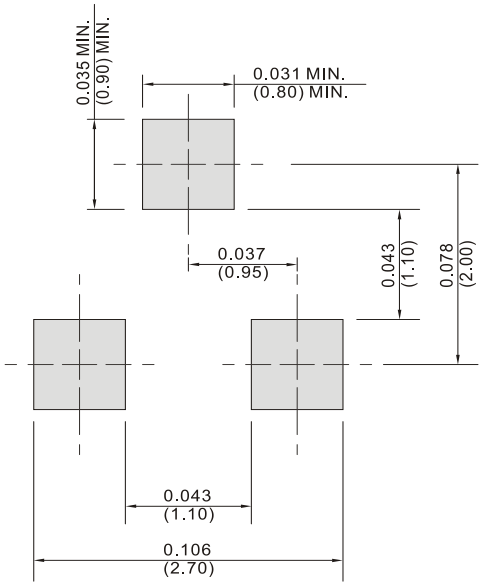
Part No.	Package Type	Packing Type	Marking
PJSOT24C-05-AU	SOT-23	3K pcs / 7” reel	6EC
PJSOT36C-05-AU	SOT-23	3K pcs / 7” reel	7EC

Packaging Information & Mounting Pad Layout

SOT-23 Dimension — Unit: inch(mm)



SOT-23 Pad Layout — Unit: inch(mm)



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