



SLVU2.8

Preliminary

DIODE

LOW VOLTAGE DIODE FOR ESD AND LATCH-UP PROTECTION

DESCRIPTION

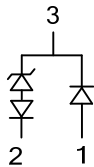
The UTC **SLVU2.8** is a low voltage diode, it uses UTC's advanced technology to provide customers with low leakage current, low capacitance, low operating and clamping voltage, etc.

The UTC **SLVU2.8** is suitable for switching systems, laser diode protection and WAN/LAN Equipment, etc.

FEATURES

- * Low leakage current
- * Low capacitance
- * Low clamping voltages
- * Low operating voltages

SYMBOL

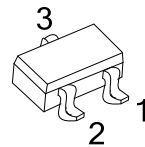
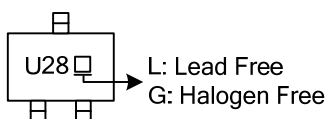


ORDERING INFORMATION

Ordering Number		Package	Packing
Lead Free	Halogen Free		
SLVU2.8L-AE3-R	SLVU2.8G-AE3-R	SOT-23	Tape Reel

SLVU2.8L-AE3-R (1) Packing Type (2) Package Type (3) Halogen Free	(1) R: Tape Reel (2) AE3 : SOT-23 (3) L: Lead Free, G: Halogen Free
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MARKING



SOT-23
(JEDEC TO-236)

■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Peak Pulse Current ($t_p=8/20\mu s$)	I_{PP}	24	A
Peak Pulse Power ($t_p=8/20\mu s$)	P_{PK}	400	W
Lead Soldering Temperature	T_L	260 (10 seconds)	°C
Storage Temperature	T_{STG}	-55~+150	°C
Operating Junction Temperature	T_J	-55~+125	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Reverse Stand-Off Voltage	V _{RWM}	Pin 3 to 2 or Pin 1 to 2			2.8	V
Punch-Through Voltage	V _{PT}	I _{PT} =2μA, Pin 3 to 2	3.0			V
Snap-Back Voltage	V _{SB}	I _{SB} =50mA, Pin 3 to 2	2.8			V
Reverse Leakage Current	I _R	V _{RWM} =2.8V, T=25°C, Pin 3 to 2 or Pin 1 to 2			1	μA
Clamping Voltage	V _C	I _{PP} =2A, t _p =8/20μs, Pin 3 to 2			3.9	V
		I _{PP} =5A, t _p =8/20μs, Pin 3 to 2			7	V
		I _{PP} =24A, t _p =8/20μs, Pin 3 to 2			12.5	V
		I _{PP} =5A, t _p =8/20μs, Pin 1 to 2			8.5	V
		I _{PP} =24A, t _p =8/20μs, Pin 1 to 2			15	V
Junction Capacitance	C _j	Pin 3 to 2 and 1 (Pin 2 and 1 Tied Together), V _R =0V, f=1MHz		70	100	pF
		Pin 1 to 2 (Pin 3 N.C.), V _R =0V, f=1MHz		5	10	pF
Steering Diode Characteristics						
Reverse Breakdown Voltage	V _{BR}	I _T =10μA, Pin 3 to 1	40			V
Reverse Leakage Current	I _{RD}	V _{RWM} =2.8V, T=25°C, Pin 3 to 1			1	μA
Forward Voltage	V _F	I _F =1A, Pin 1 to 3			2	V

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