

Features

- Halogen Free. "Green" Device (Note 1)
- Low Profile Package
- High Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note 2)("P" Suffix Designates RoHS Compliant. See Ordering Information)

**1 Amp
Schottky Rectifier
40 Volts**

Maximum Ratings @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	V_{RMS}	28	V
Average Rectified Forward Current @ $T_L=100^\circ\text{C}$	$I_{F(AV)}$	1	A
Non-Repetitive Peak Surge Current @ 8.3ms Half Sine Wave	I_{FSM}	30	A
Current Squared Time @ $1\text{ms} \leq t \leq 8.3\text{ms}$	I^2t	3.735	A^2s

SOD-323HT

Marking Diagram	Internal Structure
<p style="text-align: center;">Marking Code: 14T</p>	

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.025	0.029	0.63	0.73	
b1	0.031	0.039	0.78	0.98	
b2	0.022	0.030	0.55	0.75	
c	0.005	0.011	0.12	0.27	
D	0.091	0.106	2.30	2.70	
D1	0.083	0.091	2.10	2.30	
E	0.047	0.055	1.20	1.40	
L1	0.043	0.059	1.10	1.50	
L2	0.022	0.030	0.55	0.75	

- Note:
1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
 2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

SUGGESTED SOLDER PAD LAYOUT

Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		125	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$R_{th(J-L)}$	Thermal Resistance from Junction to Lead	Note 1		42		°C/W
$R_{th(J-A)}$	Thermal Resistance from Junction to Ambient	Note 1		260		°C/W

Note:

1. Mounted on PCB with 3.0 mm x 3.0 mm copper pad areas.

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage	V_F	$I_F=1A; T_J=25^\circ C$ $I_F=1A; T_J=100^\circ C$		0.47 0.43	0.55 0.50	V
Reverse Current	I_R	at Rated $V_R; T_J=25^\circ C$ at Rated $V_R; T_J=100^\circ C$			0.1 10	mA
Junction Capacitance	C_J	$V_R=4V; f=1MHz; T_J=25^\circ C$		52		pF

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

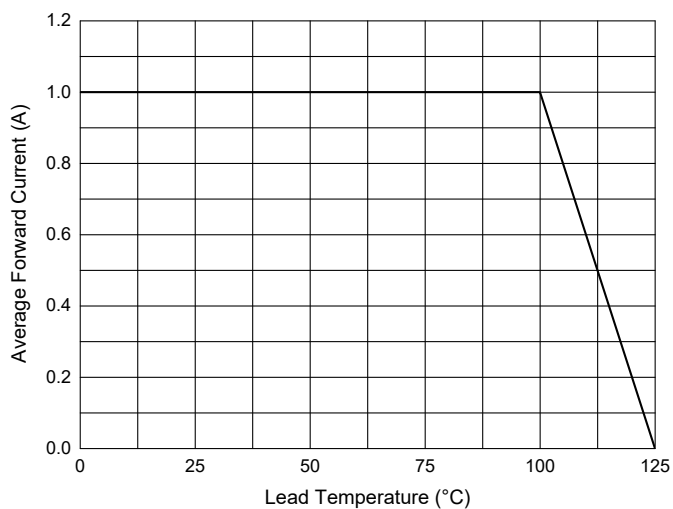


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

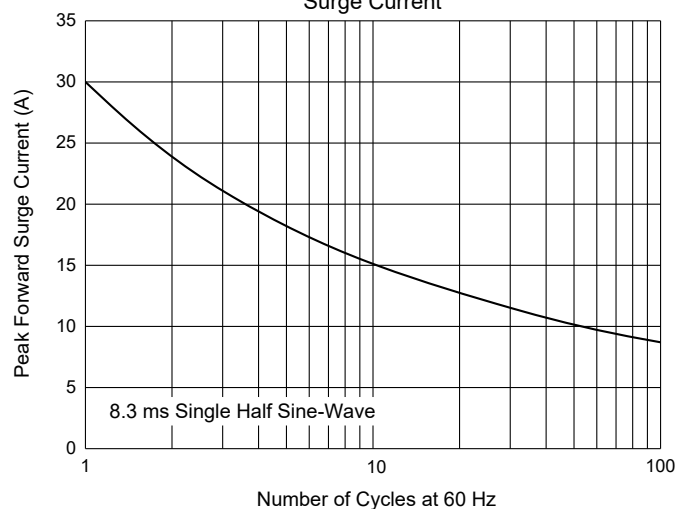


Fig. 3 - Typical Forward Characteristics

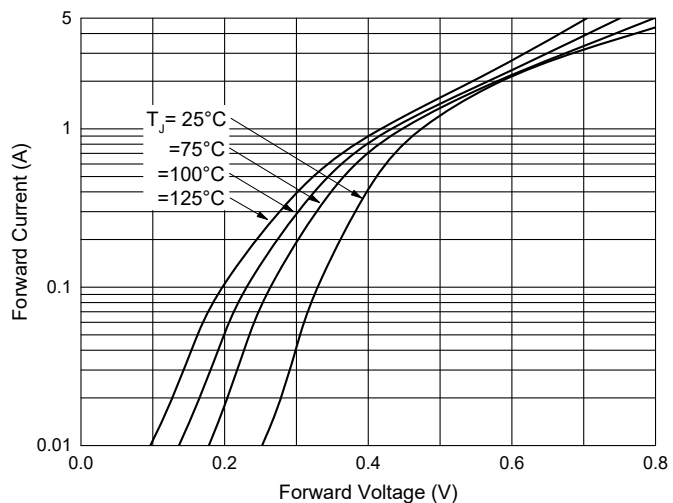


Fig. 4 - Typical Forward Characteristics

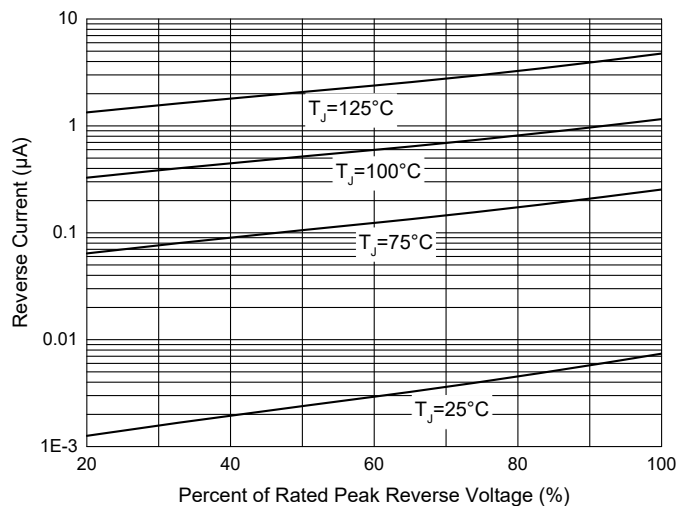
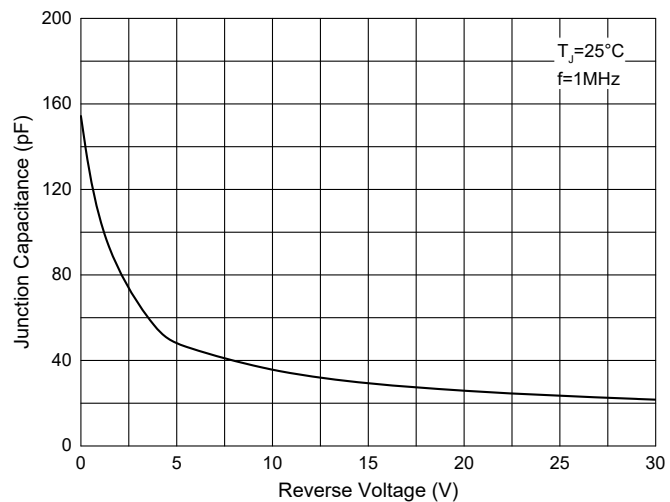


Fig. 5 - Typical Capacitance Characteristics



Ordering Information

Device	Packing
SMD14HT-TP	Tape&Reel:2.5Kpcs/Reel

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