

ELECTRICAL SPECIFICATIONS						
PARAMETER	SYMBOL	TEST CONDITIONS		VALUES	UNITS	
Maximum forward voltage drop See fig. 1	$V_{FM}^{(1)}$	1 A	$T_J = 25\text{ }^{\circ}\text{C}$	0.63	V	
		1.5 A		0.71		
		1 A	$T_J = 125\text{ }^{\circ}\text{C}$	0.57		
		1.5 A		0.63		
Maximum reverse leakage current See fig. 2	$I_{RM}^{(1)}$	$T_J = 25\text{ }^{\circ}\text{C}$	$V_R = \text{Rated } V_R$	0.5	mA	
		$T_J = 125\text{ }^{\circ}\text{C}$		7.5		
Threshold voltage	$V_{F(TO)}$	$T_J = T_J \text{ maximum}$		0.45	V	
Forward slope resistance	$r_t$			86.8	mΩ	
Typical junction capacitance	$C_T$	$V_R = 10\text{ V}_{DC}$ , $T_J = 25\text{ }^{\circ}\text{C}$ , test signal = 1 MHz		31	pF	
Typical series inductance	$L_S$	Measured lead to lead 5 mm from package body		2.0	nH	
Maximum voltage rate of change	dV/dt	Rated $V_R$		10 000	V/μs	

**Note**

(1) Pulse width &lt; 300 μs, duty cycle &lt; 2 %

THERMAL - MECHANICAL SPECIFICATIONS				
PARAMETER	SYMBOL	TEST CONDITIONS	VALUES	UNITS
Maximum junction and storage temperature range	$T_J^{(1)}$ , $T_{Stg}$		- 55 to 150	°C
Maximum thermal resistance, junction to ambient	$R_{thJA}$	DC operation	80	°C/W
Approximate weight			0.07	g
			0.002	oz.
Marking device		Case style SMA (similar D-64)	V1H	

**Note**(1)  $\frac{dP_{tot}}{dT_J} < \frac{1}{R_{thJA}}$  thermal runaway condition for a diode on its own heatsink

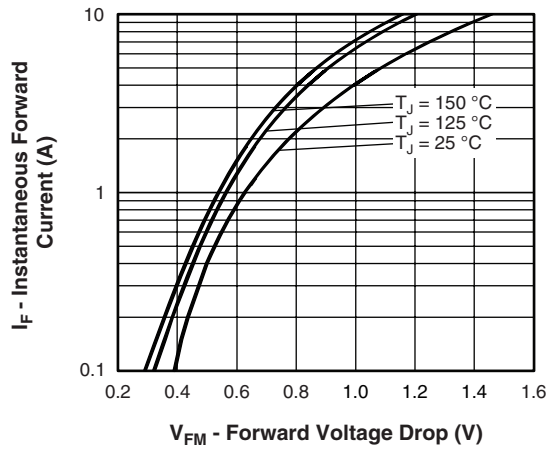


Fig. 1 - Maximum Forward Voltage Drop Characteristics

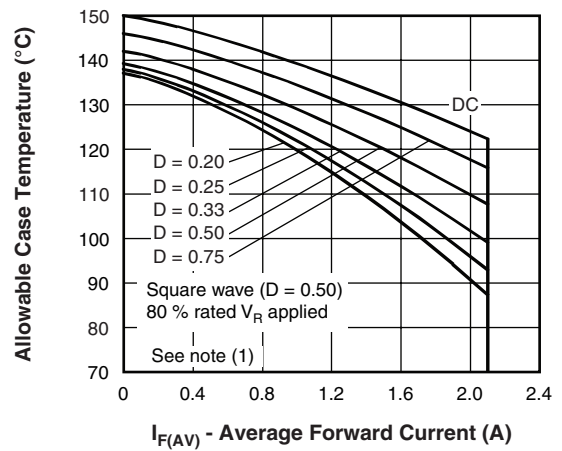


Fig. 4 - Maximum Average Forward Current vs. Allowable Lead Temperature

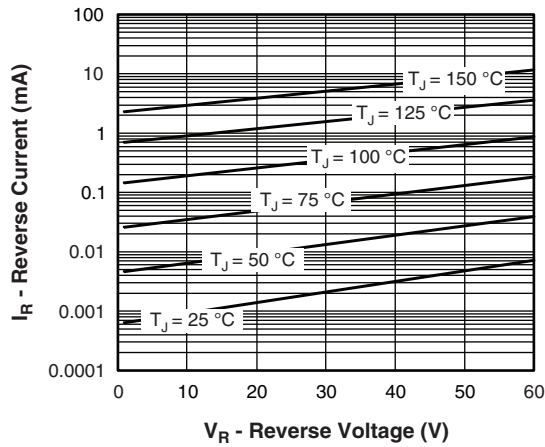


Fig. 2 - Typical Peak Reverse Current vs. Reverse Voltage

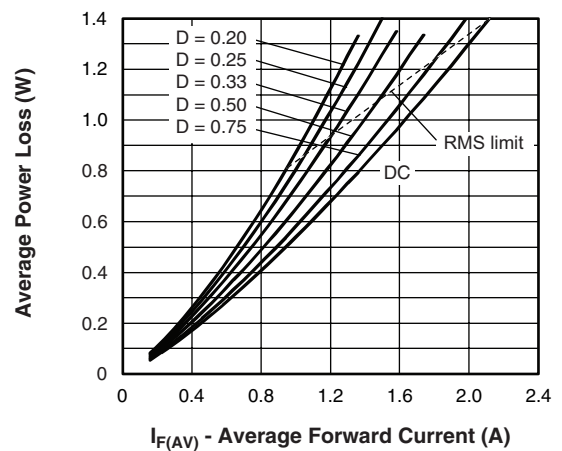


Fig. 5 - Maximum Average Forward Dissipation vs. Average Forward Current

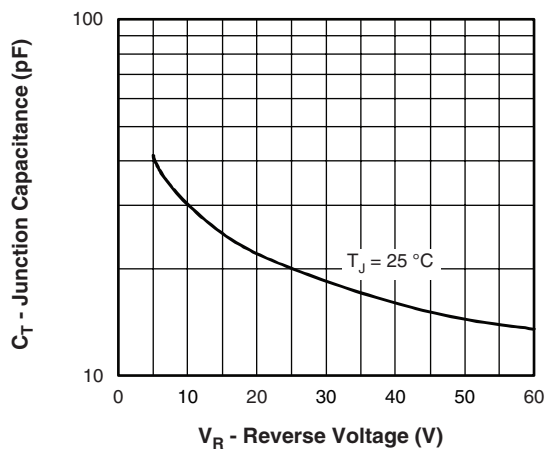


Fig. 3 - Typical Junction Capacitance vs. Reverse Voltage

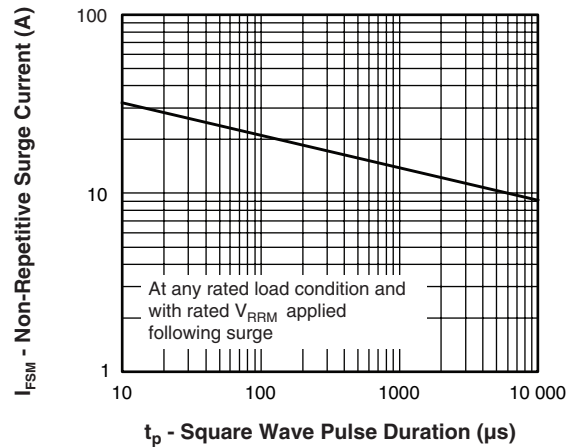


Fig. 6 - Maximum Peak Surge Forward Current vs. Pulse Duration

### Note

(1) Formula used:  $T_C = T_J - (P_d + P_{d_{REV}}) \times R_{thJC}$

$P_d$  = Forward power loss =  $I_{F(AV)} \times V_{FM}$  at  $(I_{F(AV)}/D)$  (see fig. 6);  $P_{d_{REV}}$  = Inverse power loss =  $V_{R1} \times I_{R1} (1 - D)$ ;  $I_{R1}$  at  $V_{R1} = 80\%$  rated  $V_R$

## ORDERING INFORMATION TABLE

Device code	10	M	Q	060	N	TR	PbF
	1	2	3	4	5	6	7

- 1** - Current rating
- 2** - M = SMA
- 3** - Q = Schottky "Q" series
- 4** - Voltage rating (060 = 60 V)
- 5** - N = New SMA
- 6** -
  - None = Box (1000 pieces)
  - TR = Tape and reel (7500 pieces)
- 7** - PbF = Lead (Pb)-free

LINKS TO RELATED DOCUMENTS	
Dimensions	<a href="http://www.vishay.com/doc?95018">www.vishay.com/doc?95018</a>
Part marking information	<a href="http://www.vishay.com/doc?95029">www.vishay.com/doc?95029</a>
Packaging information	<a href="http://www.vishay.com/doc?95034">www.vishay.com/doc?95034</a>



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