ELECTRICAL SPECIFICATIONS					
PARAMETER	**SYMBOL**	**TEST CONDITIONS**		**VALUES**	**UNITS**
Maximum forward voltage drop	V_{FM} (1)	3 A	T_J = 25 °C	0.79	V
		6 A		0.90	
		3 A	T_J = 125 °C	0.62	
		6 A		0.70	
Maximum reverse leakage current	I_{RM} (1)	T_J = 25 °C	V_R = Rated V_R	0.1	mA
		T_J = 125 °C		5.0	
Maximum junction capacitance	C_T	V_R = 5 V_{DC} (test signal range 100 kHz to 1 MHz), 25 °C		115	pF
Typical series inductance	L_S	Measured lead to lead 5 mm from package body		3.0	nH
Maximum voltage rate of change	dV/dt	Rated V_R		10 000	V/µs

Note

(1) Pulse width < 300 µs, duty cycle < 2 %

THERMAL - MECHANICAL SPECIFICATIONS				
PARAMETER	**SYMBOL**	**TEST CONDITIONS**	**VALUES**	**UNITS**
Maximum junction and storage temperature range	T_J (1), T_{Stg}		- 55 to 175	°C
Maximum thermal resistance, junction to lead	R_{thJL} (2)	DC operation	12	°C/W
Maximum thermal resistance, junction to ambient	R_{thJA}		46	
Approximate weight			0.24	g
			0.008	oz.
Marking device		Case style SMC (similar to DO-214AB)	V3JG	

Notes

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

(2) Mounted 1" square PCB

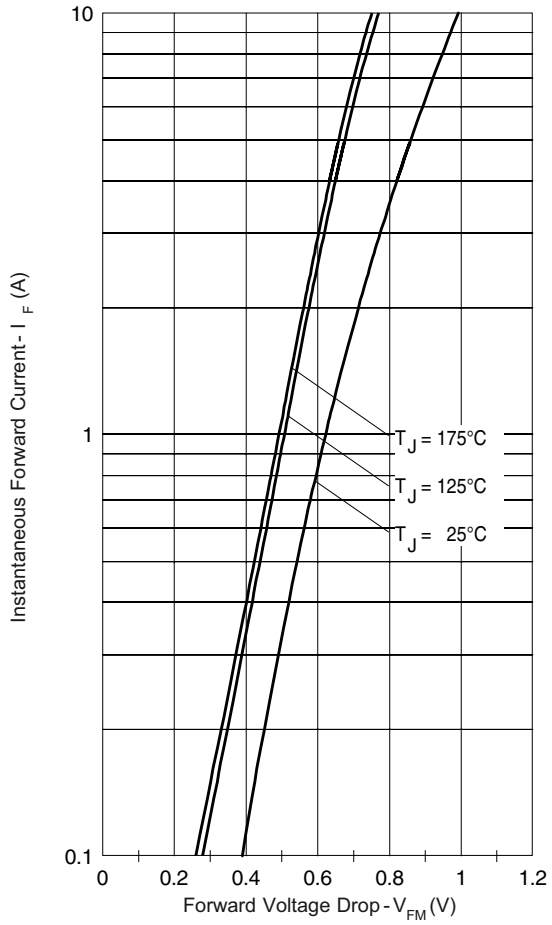


Fig. 1 - Maximum Forward Voltage Drop Characteristics (Per Leg)

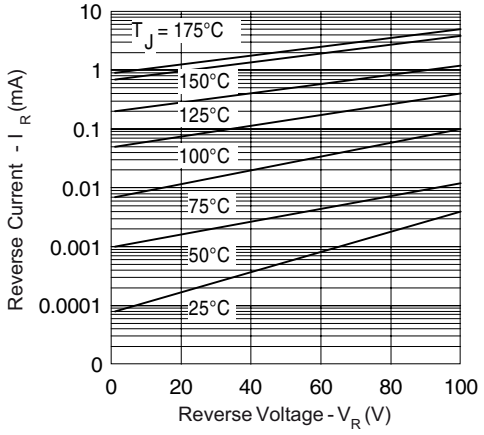


Fig. 2 - Typical Values of Reverse Current vs. Reverse Voltage (Per Leg)

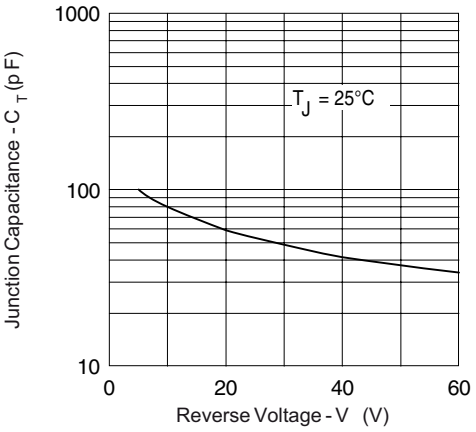


Fig. 3 - Typical Junction Capacitance vs. Reverse Voltage (Per Leg)

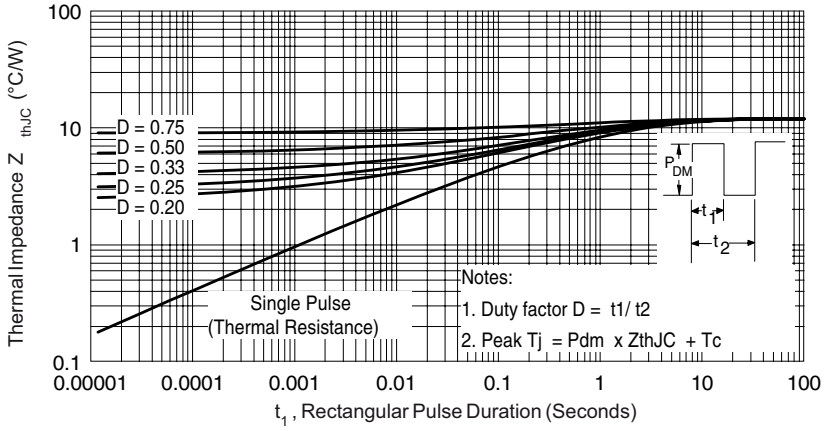


Fig. 4 - Maximum Thermal Impedance Z_{thJC} Characteristics (Per Leg)

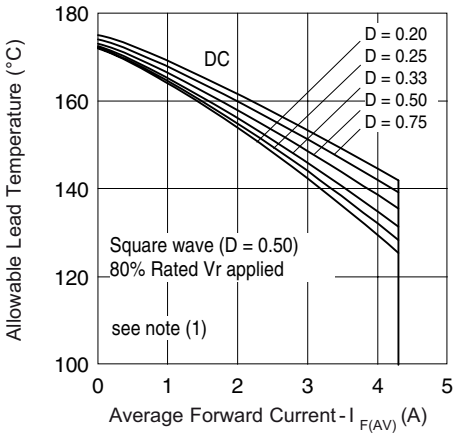


Fig. 5 - Maximum Average Forward Current vs. Allowable Lead Temperature

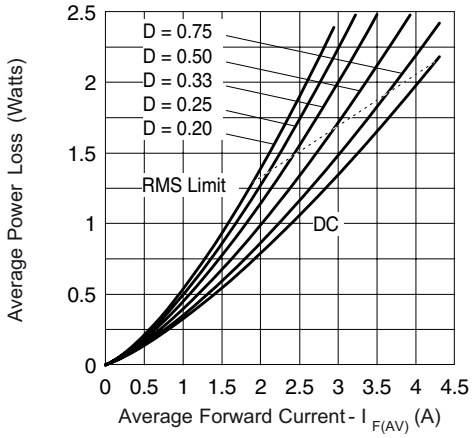


Fig. 6 - Maximum Average Forward Dissipation vs. Average Forward Current

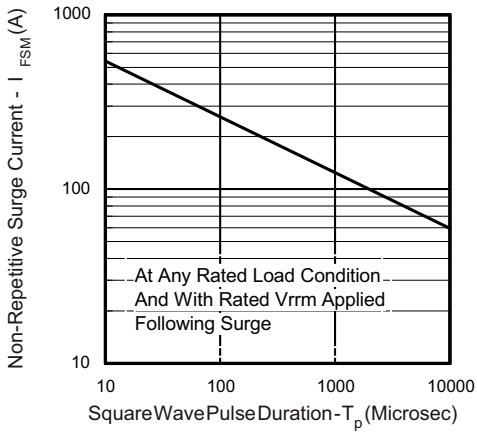


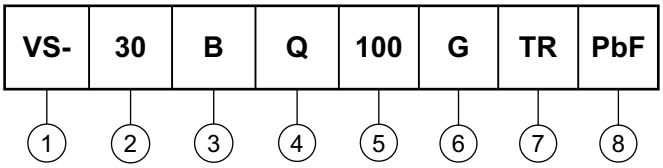
Fig. 7 - Maximum Peak Surge Forward Current vs. Pulse Duration

Note

(1) Formula used: $T_C = T_J - (Pd + Pd_{REV}) \times R_{thJC}$;
Pd = Forward power loss = $I_{F(AV)} \times V_{FM}$ at ($I_{F(AV)}$/D) (see fig. 6);
Pd_{REV} = Inverse power loss = $V_{R1} \times I_R(1 - D)$; I_R at V_{R1} = 80 % rated V_R

ORDERING INFORMATION TABLE

Device code

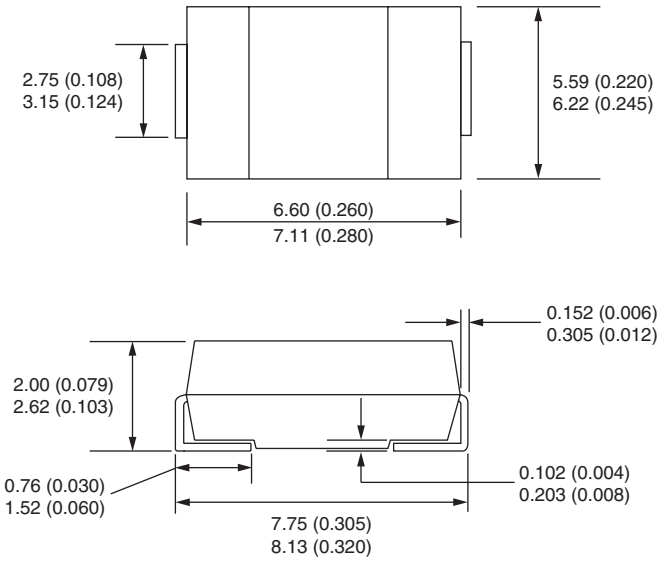


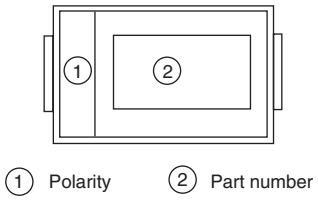
1 - HPP product suffix
2 - Current rating
3 - B = Single lead diode
4 - Q = Schottky “Q” series
5 - Voltage rating (100 = 100 V)
6 - G = Schottky generation
7 - • None = Box (1000 pieces)
    • TR = Tape and reel (3000 pieces)
8 - PbF = Lead (Pb)-free

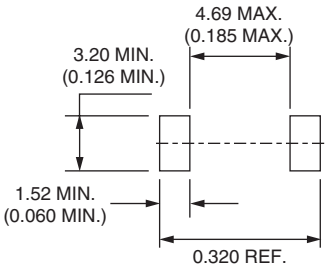
LINKS TO RELATED DOCUMENTS		
Dimensions		www.vishay.com/doc?95023
Part marking information		www.vishay.com/doc?95029
Packaging information	Tape and reel	www.vishay.com/doc?95034
	Bulk	www.vishay.com/doc?95397

SMC

DIMENSIONS in millimeters (inches)







Soldering pad

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