



the following features are made possible in a single device:

Major ratings and characteristics

Characteristics	Values	Units
$I_{F(AV)}$ Rectangular Waveform	2	A
V_{RRM}	40	V
$V_F@2A, T_j=125^\circ C$	0.37	V, typ
T_j (operating/storage)	-65 to 150	$^\circ C$

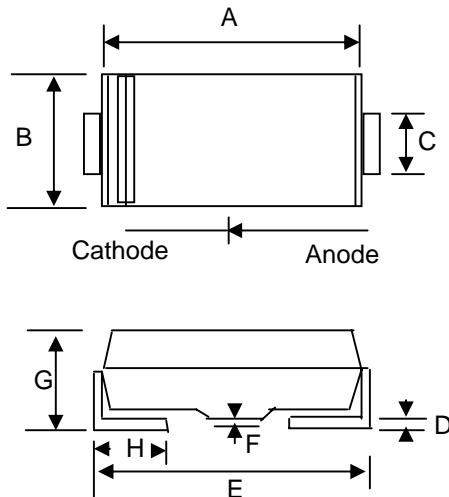
Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications

ELECTRICAL:

- * Ultra Low Forward Voltage Drop
- * Reliable High Temperature Operation
- * Softest, fast switching capability
- * $150^\circ C$ Operating Junction Temperature
- * Lead Free Finish, RoHS Compliant

MECHANICAL:

- * Molded Plastic Low profile SMA



SMA		
DIM.	Min	Max
A	4.06	4.57
B	2.29	2.92
C	1.27	1.63
D	0.15	0.31
E	4.83	5.59
F	0.05	0.20
G	1.30	1.70
H	0.76	1.52
unit : mm		



Maximum Ratings and Electrical Characteristics

(at 25°C unless otherwise specified)

	SYMBOL			UNITS
DC Blocking Voltage	V_{RM}			Volts
Working Peak Reverse Voltage	V_{RWM}	40		
Peak Repetitive Reverse Voltage	V_{RRM}			
Average Rectified Forward Current (Rated V_R -20Khz Square Wave) - 50% duty cycle	I_O	2		Amps
Peak Forward Surge Current - 1/2 60hz	I_{FSM}	50		Amps
Peak Repetitive Reverse Surge Current (2uS-1Khz)	I_{RRM}	1		Amps
Instantaneous Forward Voltage (per leg) $I_F = 2A; T_J = 25^\circ C$ $I_F = 2A; T_J = 125^\circ C$	V_F^*	Typ --- ---	Max 0.42 0.38	Volts
Maximum Instantaneous Reverse Current at Rated V_{RM} $T_J = 25^\circ C$ $T_J = 125^\circ C$	I_R	Typ --- ---	Max 1 50	mA mA
Maximum Rate of Voltage Change (at Rated V_R)	dv/dt	10,000		V/uS
Maximum Thermal Resistance JT (per leg) junction to terminal RthJT	$R_{\theta_{JT}}$	20		°C/W
Operating Junction Temperature	T_J	-65 to +150		°C
Storage Junction Temperature	T_{STG}	-65 to +150		°C

NOTE: Dice are available for customer applications.

* Pulse width < 300 uS, Duty cycle < 2%

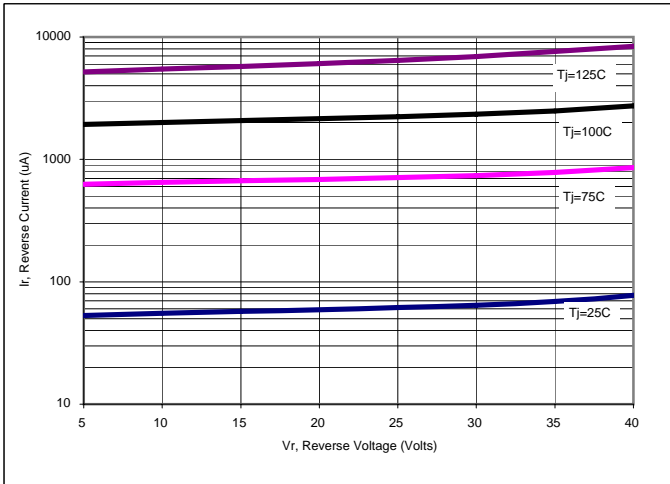


Figure 1: Typical Reverse Current

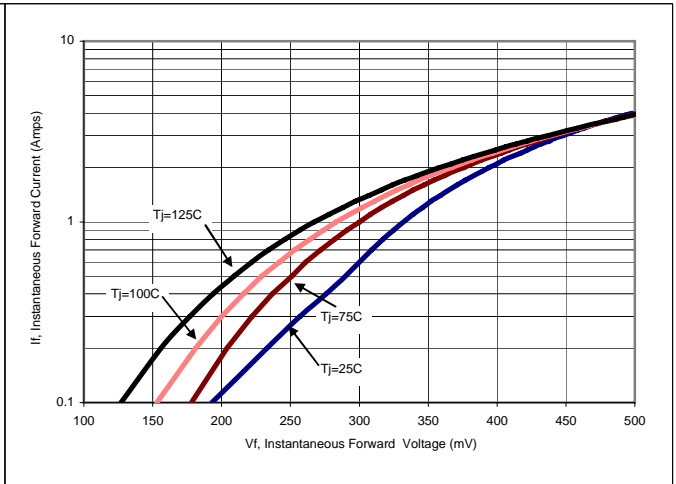


Figure 2: Typical Forward Voltage

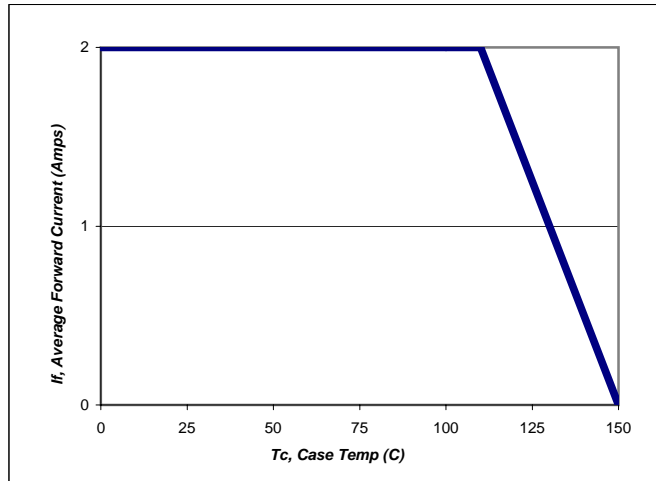


Figure 3: Current Derating, Case

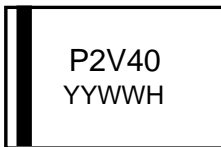


Ordering information

<i>Part Number</i>	<i>Case</i>	<i>Packaging</i>
P2V40	SMA	800 pieces / ammo-pack
P2V40H	SMA	800 pieces / ammo-pack

Note: For Halogen Free molding compound, add "H" suffix to part number above.

Marking information



P2V40 = Product Type Marking Code

YYWW = Date Code

YY = Last two digits of year

WW = Week code

H = Halogen Free (N/A = common molding compound)

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