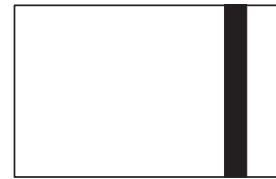
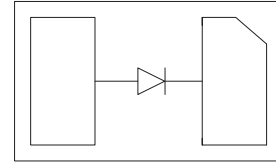


»Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction



»General Description

- Case: molded plastic
- Package: DFN1610-2L Plastic Package

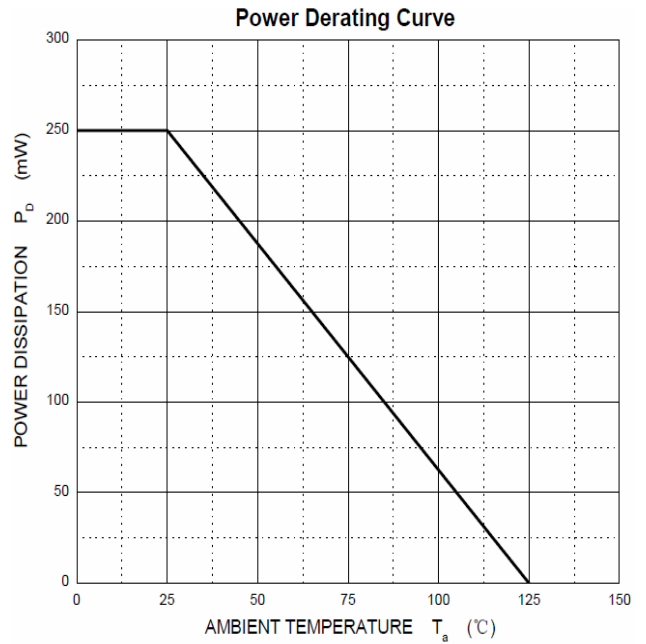
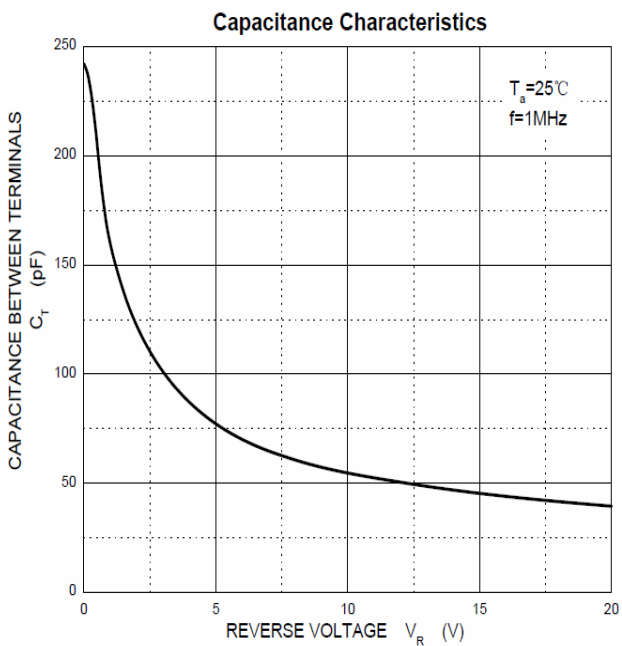
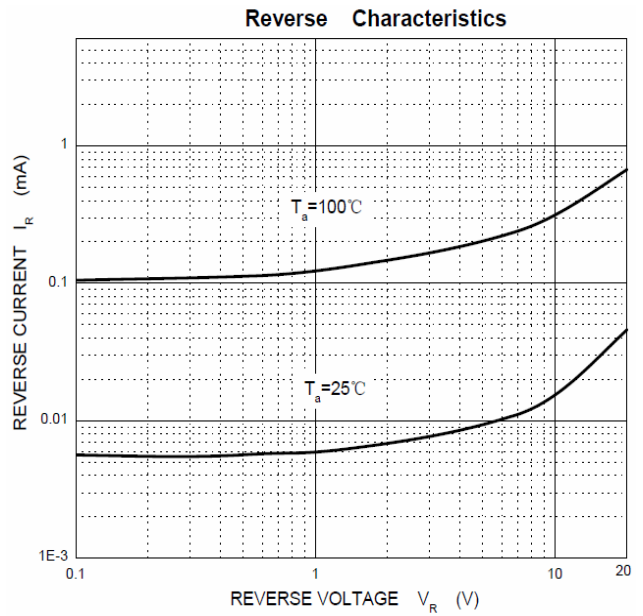
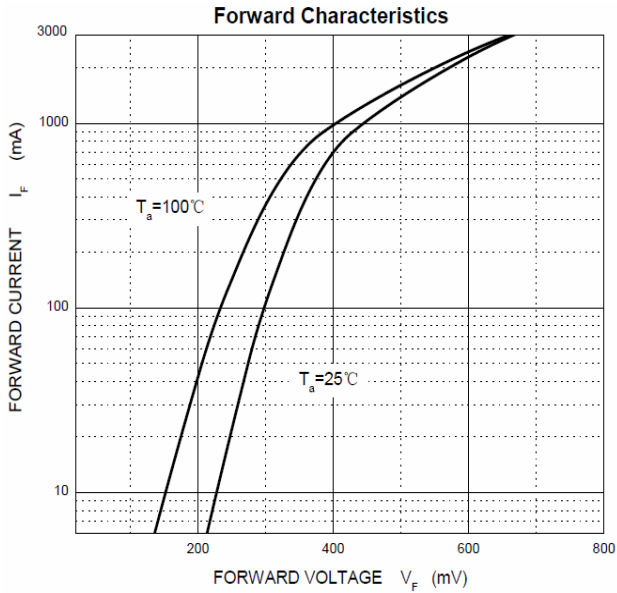
» Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise noted

Parameters	Symbol	BN5A1V40	Unit
Maximum repetitive peak reverse voltage	VRRM	40	V
Maximum RMS voltage	VRMS	28	V
Maximum DC blocking voltage	VDC	40	V
Maximum average forward rectified current	IFM	1.0	A
Peak forward surge current 8.3 ms single half sine-wave	IFSM	9.0	A
Power Dissipation	PD	250	mW
typical thermal resistance	R θ JA	400	$^{\circ}\text{C}/\text{W}$
Operating junction temperature	T _j	125	$^{\circ}\text{C}$
Storage temperature range	TSTG	-50-+150	$^{\circ}\text{C}$

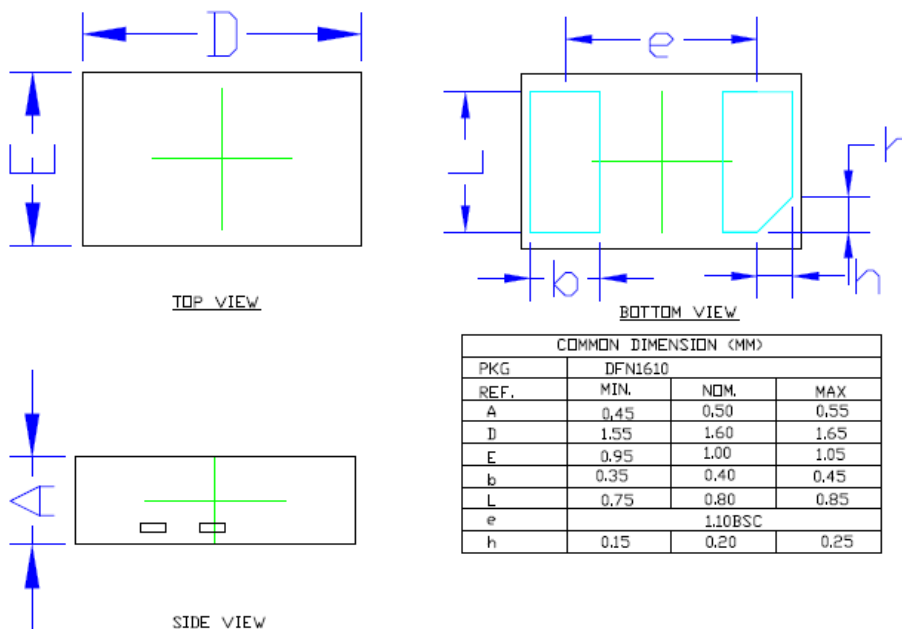
» **Electrical Characteristics** @ $T_A=25^{\circ}\text{C}$ unless otherwise noted

Parameters	Symbol	Test conditions	BN5A1V40	Unit
Maximum forward voltage	V_F	$I_F = 1.0\text{A}$	0.6	V
Maximum reverse breakdown voltage	V_R	$I_R=1\text{mA}$	40	V
Maximum reverse current	I_R	$V_R=40\text{V}$	100	μA
Type junction capacitance	C_j	$V_R = 4\text{V}, f = 1\text{MHz}$	120	pF
Reverse recovery time	T_{rr}	$I_F=I_R=10\text{mA},$ $I_{rr}=0.1 \times I_R, R_L=100 \Omega$	15	ns

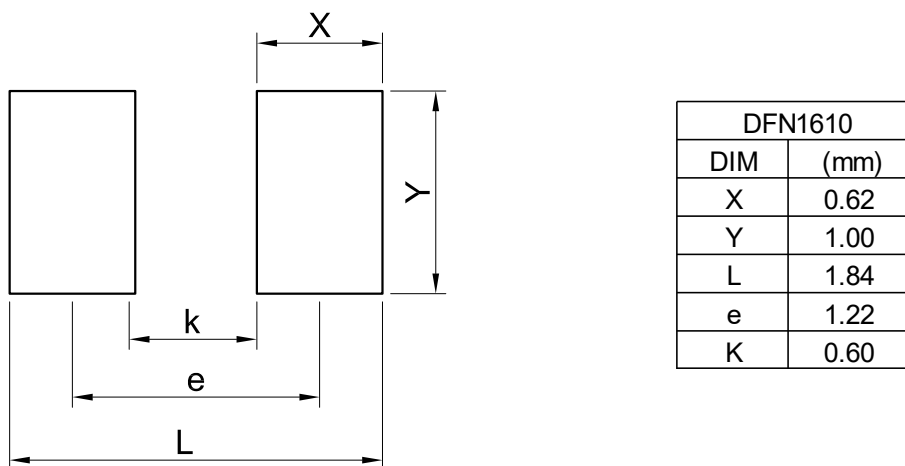
»Typical Performance Characteristics (T_J = 25 °C, unless otherwise noted)



»Package Information



»Layout Information



»Ordering information

Order code	Package	Marking	Base qty	Delivery mode
BN5A1V40	DFN1610-2L	1V40	10K	Tape and reel