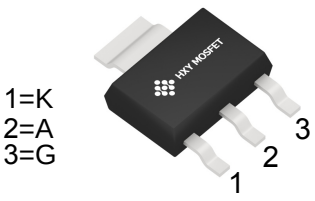
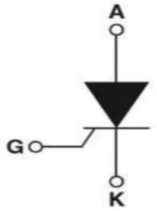
Description

The X0202NN5BA4 provide high dv/dt rate with strong resistance to electromagnetic interface. They are especially recommended for use on residual current circuit breaker, straight hair, igniter etc.



SOT-223



Main Features

symbol	value	unit
$I_{T(RMS)}$	2.0	A
I_{GT}	90	μA
V_{DRM}/V_{RRM}	800	V

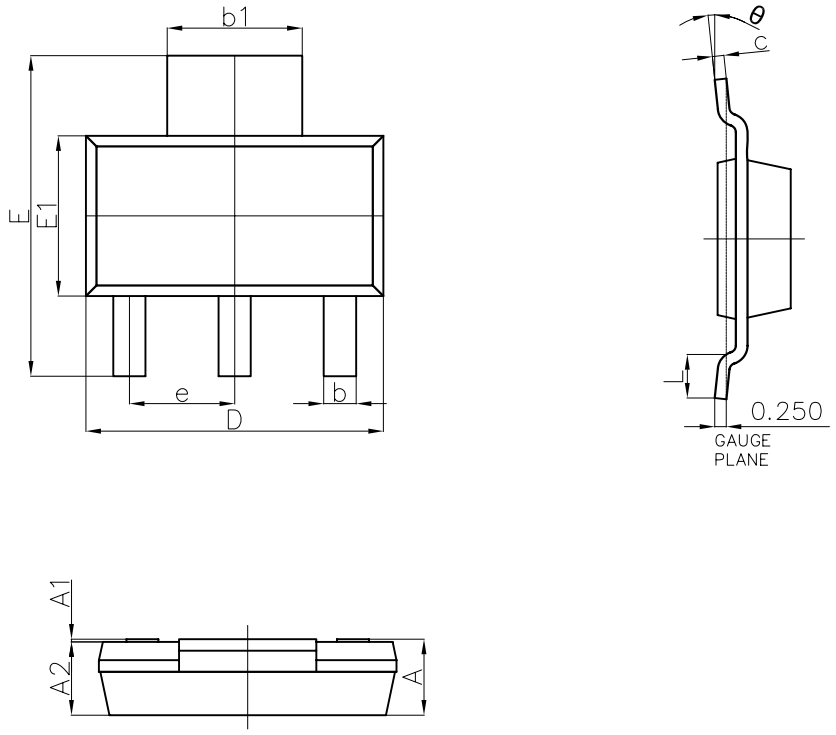
Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Storage junction temperature range	T_{stg}	-40~150	°C
Operating junction temperature range	T_j	125	°C
Repetitive peak off-state voltage (T_j=25°C)	V_{DRM}	800	V
Repetitive peak reverse voltage (T_j=25°C)	V_{RRM}	800	V
RMS on-state current	$I_{T(RMS)}$	2	A
Non repetitive surge peak on-state current (full cycle, F=50Hz)	I_{TSM}	20	A

Electrical Characteristics (T_j=25°C unless otherwise specified)

Symbol	Test Condition	Value			Unit
		Min	Typ	Max	
I_{GT}	V_D=12V, R_L=100Ω	-	-	90	μA
V_{GT}		-	-	0.8	V
V_{GD}	V_D=1/2V_{DRM}	0.2	-	-	V
I_H	I_T=100mA, R_{GK}=1kΩ	-	-	3	mA
dV/dt	V_D=67%V_{DRM} T_j=110°C R_{GK}=1KΩ	20	-	-	V/μs
V_{TM}	I_T =2A	-	-	1.6	V
I_{DRM} I_{RRM}	V_D=V_{DRM}= V_{RRM} R_{GK}=1kΩ	-	-	0.1	mA

SOT-223 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	——	1.800	——	0.071
A1	0.020	0.100	0.001	0.004
A2	1.500	1.700	0.059	0.067
b	0.660	0.840	0.026	0.033
b1	2.900	3.100	0.114	0.122
c	0.230	0.350	0.009	0.014
D	6.300	6.700	0.248	0.264
E	6.700	7.300	0.264	0.287
E1	3.300	3.700	0.130	0.146
e	2.300(BSC)		0.091(BSC)	
L	0.750	——	0.030	——
θ	0°	10°	0°	10°

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