



Features

- Glass passivated pellet chip junction
- Low profile package
- Ideal for automated placement
- Low reverse current
- High reverse voltage
- Ultra fast reverse recovery time
- RoHs, REACH and WEEE compliant.

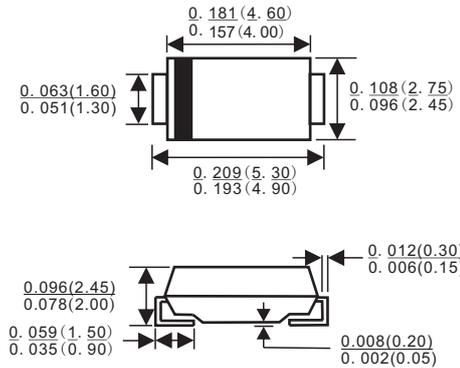
Typical Applications

- For use in high voltage,high frequency rectification specially suited for freewheeling,clamping,snubbing in power supply,ignition drive of HID,UHP and industrial ballast and snubber for PDP TV power supply application.

Mechanical Data

- Package:SMA(DO-214AC)
Molding compound meets UL 94 V-0 flammability Rating,RoHS-compliant.
- Terminals: Tin plated leads,solderable per J-STD-002 and JESD22-B102.
- Moisture Sensitivity: MSL Level 1,per J-STD-020 Solderable per MIL-STD-202 Method 208
- Polarity:As marked

SMA/DO-214AC



Dimensions in inches and(millimeters)

■Maximum Ratings(Ta= 25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BYG23T
Device marking code			BYG23T
Maximum repetitive Peak Reverse Voltage	V_{RRM}	V	1300
Maximum DC forward Current(fig.1)	I_F	A	1.0
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	A	18
Pulse energy in avalahche mode,non repetitive (inductive load switch off) $I_{(BR)}=0.4A, T_L=25^\circ C$	E_R	mJ	5.0
Storage temperature range	T_{stg}	°C	-55~150
Junction temperature	T_j	°C	-55~150
Junction capacitance@4.0V,1MHz	C_J	pF	9.0



■Electrical Characteristics

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Min	Typ	Max
Instantaneous forward voltage	V_F	V	$I_F=1.0A@T_A=25^{\circ}C$	-	1.74	1.90
			$I_F=1.0A@T_A=125^{\circ}C$	-	1.39	1.65
DC reverse current at rated DC blocking voltage per diode	I_{RRM1}	μA	$V_{RM}=V_{RRM}$ $T_A=25^{\circ}C$	-	1.0	5.0
	I_{RRM2}		$V_{RM}=V_{RRM}$ $T_A=125^{\circ}C$	-	2.9	50
Reverse Recovery Time	T_{rr}	ns	$I_F=0.5A, I_{RM}=1A$ $I_{RR}=0.25A, T_A=25^{\circ}C$	-	65	75

■Thermal Characteristics(T a= 25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	MUR1610CT
Thermal Resistance	Between junction and mount	$R_{\theta J-M}$	$^{\circ}C/W$	20
Thermal Resistance	Between junction and Air	$R_{\theta J-A}$	$^{\circ}C/W$	120

■Ordering Information(Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BYG23T	Approximate 0.068	5000	10000	80000	REEL



■ RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

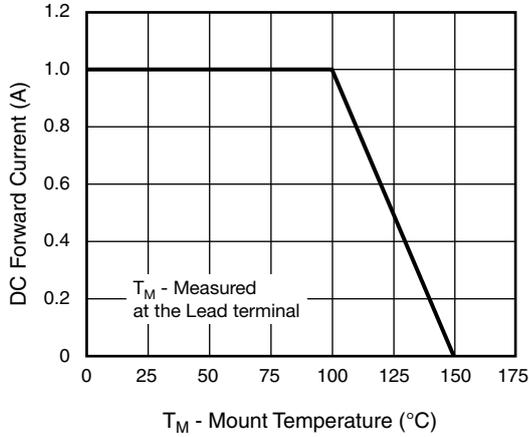


Fig. 1 - Max. Forward Current Derating Curve

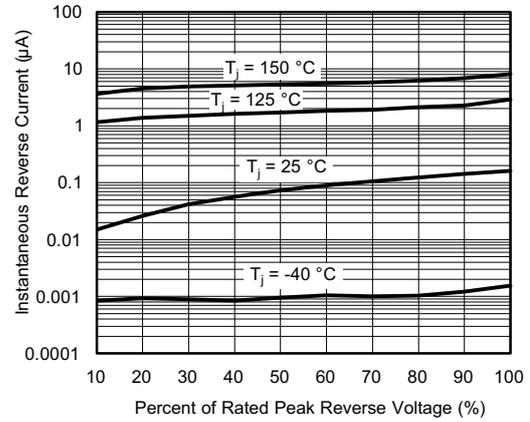


Fig. 4 - Typical Reverse Characteristics

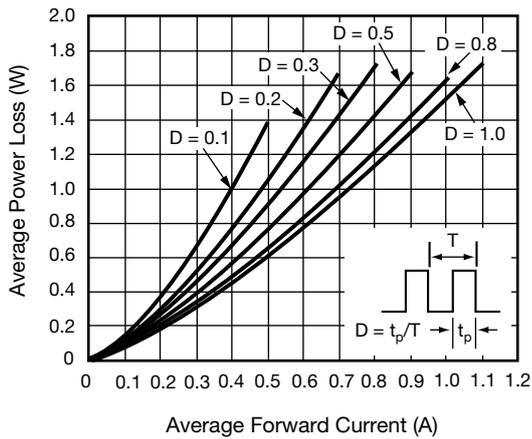


Fig. 2 - Forward Power Loss Characteristics

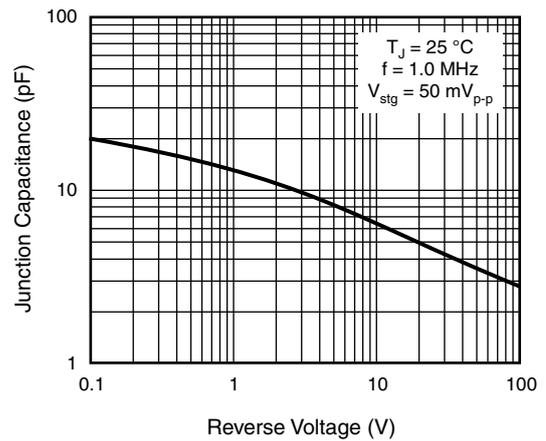


Fig. 5 - Typical Junction Capacitance

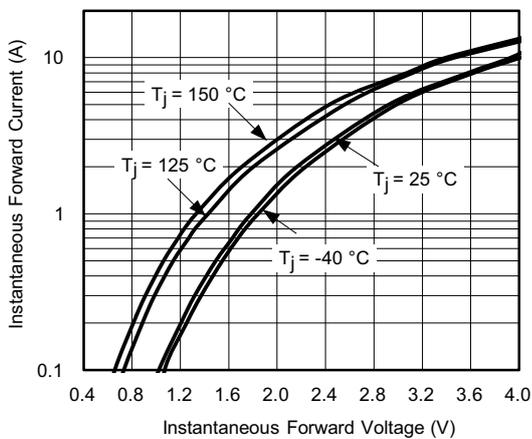


Fig. 3 - Typical Instantaneous Forward Characteristics

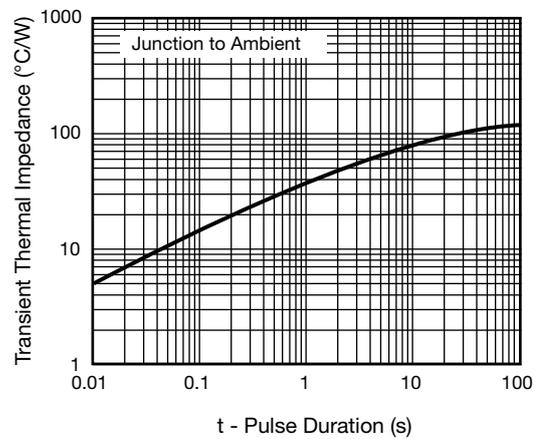


Fig. 6 - Typical Transient Thermal Impedance