

VOLTAGE RANGE

100 Volts

CURRENT

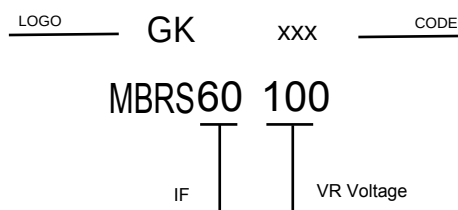
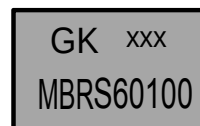
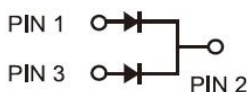
60.0 Ampere

FEATURES

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection

MECHANICAL DATA

- **Case:** Molded plastic
- **Polarity:** As marked
- **Mounting Position:** Any
- **Molded Plastic:** UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Solder bath temperature 275°C maximum, 10s per JESD 22-B106



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristics		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	100	V
Working Peak Reverse Voltage		V_{RWM}	100	V
Maximum DC Blocking Voltage		V_{DC}	100	V
Maximum Average Forward Rectified Current	Per Leg	I_O	30	A
	Total		60	
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)		I_{FSM}	550	A
Operating Temperature Range		T_J	150	°C
Storage Temperature Range		T_{STG}	-40 to +150	°C
Typical Thermal Resistance (Note1)		$R_{\theta JC}$	2	°C/W

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

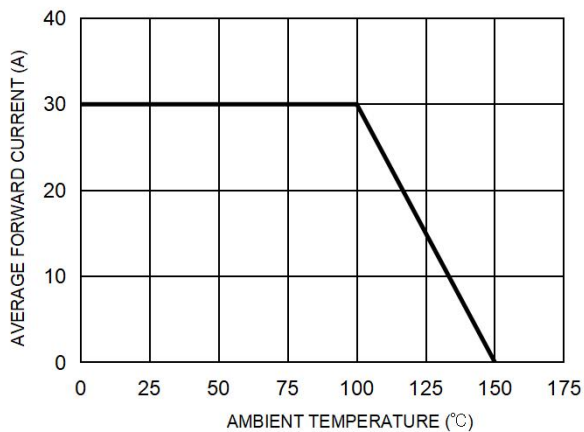


FIG.2-TYPICAL FORWARD CHARACTERISTICS

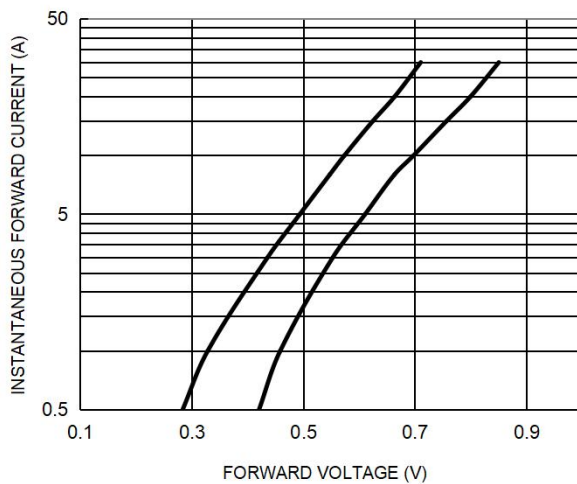


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

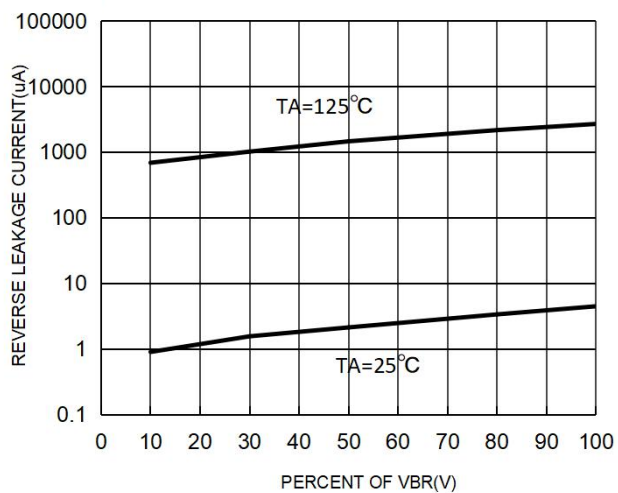
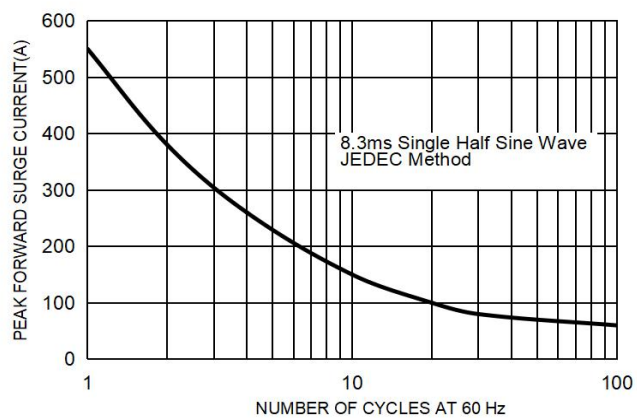
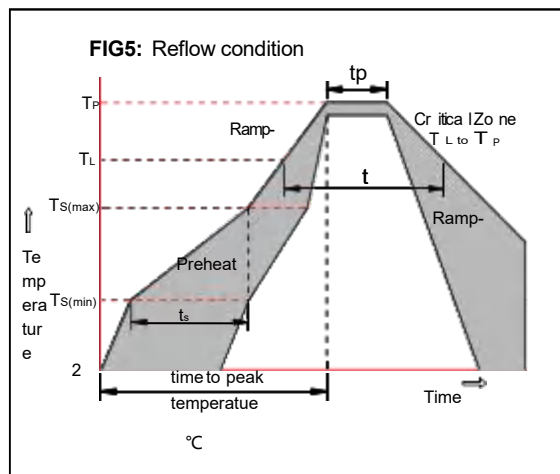


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



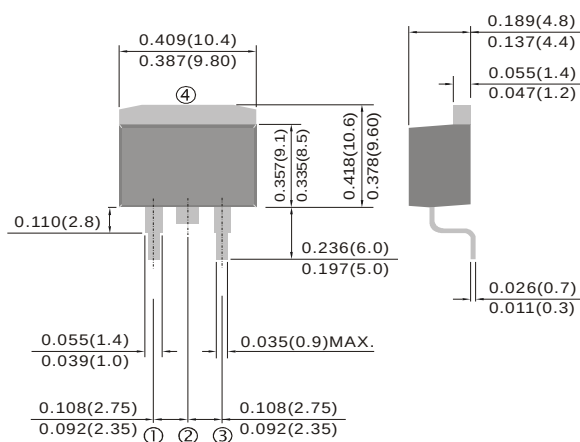
Soldering parameters

Reflow Condition		Pb-Free assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (ts)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217°C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_P)		30 secs. Max
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C

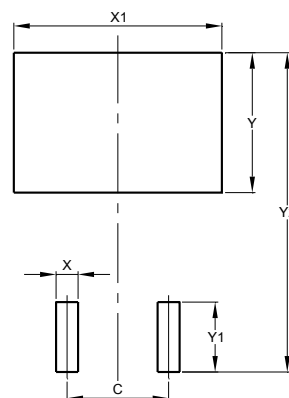


Package Dimensions & Suggested Pad Layout

TO-263 / D²PAK



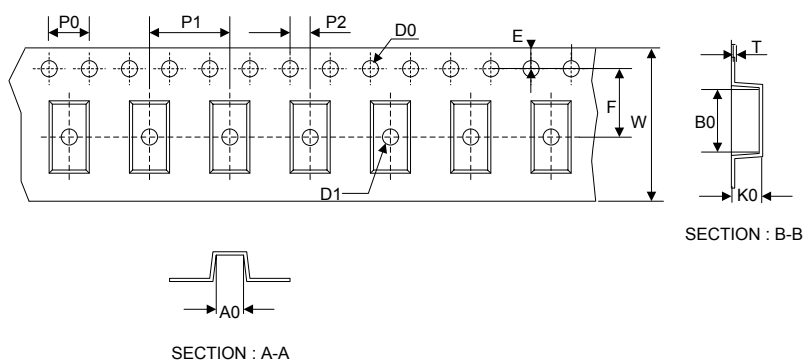
Dimensions in inches and (millimeters)



Dimensions	Value (in mm)
C	5.05
X	1.40
X1	11.00
Y	9.20
Y1	4.00
Y2	16.60

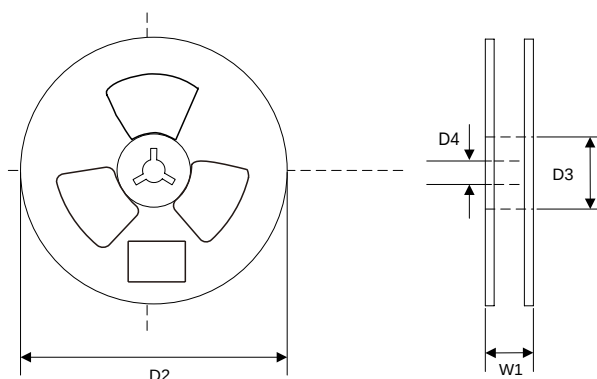
Tape & reel specification

Tape



Symbol	Dimension (mm)
P0	4.00±0.20
P1	16.00±0.20
P2	2.00±0.20
D0	1.50±0.20
D1	1.50±0.20
E	1.75±0.15
F	11.50±0.20
W	24.00±0.40
A0	10.50±0.20
B0	16.00±0.25
K0	5.20±0.25
T	0.35±0.10

13" Reel



D2	330.0±5.0
D3	73Min.
D4	14.0±2.5
W1	28.00±2.0
Quantity: 800PCS	